Chapter 18
The Architectural History and Description of Ṣan'ā' Mosques: The Great Mosque

Introduction

According to al-Rāzī there were 106 mosques in Ṣan'ā' in the 5th/11th century.[1] There is approximately the same number today. Of these, thirty-four are large mosques of some age, and two are recently built. The remainder are small shrines most of which have little historic or architectural interest.

Only two Ṣan'ā' mosques, apart from the Great Mosque, can be dated earlier than the 4th/10th century from literary sources. One is the open-air Jabbānah, which was founded by Farwah b. Musayk al-Murādī, Companion of the Prophet, and the other is the nearby Mosque of Farwah, in which he is reputedly buried.

In spite of the lack of documentary evidence, there is a number of other Ṣan'ā' mosques which can be observed to incorporate remains of early buildings, datable on stylistic grounds, and a few, which remain relatively unaltered, closely resemble ancient mosques which can be accurately dated in other parts of the highland area.

The Great Mosque (al-Jāmi' al-Kabīr)

Foundation

According to the traditions as reported by the early historians, the Great Mosque of Ṣan'ā' was built on the order of the Prophet Muḥammad during his lifetime. As for the man who carried out the Prophet's wishes in building a mosque in Ṣan'ā', the traditions are not unanimous and several names are suggested for the builder of the original structure. The most popular choice, however, would appear to be Wabr b. Yuḥannis al-Khuzā'ī, one of the Prophet's early governors in Ṣan'ā'.[2] Other names mentioned in connection with the building of the Mosque are Farwah b. Musayk al-Murādī, who built a mosque bearing his own name and is also reputed to have been responsible for the erection of the Jabbānah,[3] Abān b. Sa'īd[4] and al-Muhājir b. Umayyah.[5]

If we are not sure of the actual builder of the original mosque, there is no doubt about its location. It was built in the garden of Bādhān, that is of Bādhān b. Sāsān, who had been the Persian governor at the time Islam came to the Yemen, and who had been retained as governor in Ṣan'ā' by Muḥammad. The mosque was to be built between the rock called al-Mulamlamah as far as the palace of Ghumdān. The position of al-Mulamlamah is still pointed out today, on the outside edge of the western wall of the Great Mosque within the ablution court (pl.18.59).[6] The tell which would appear to be that of Ghumdān begins a few metres to the east of its present eastern wall. The *qiblah* was fixed on a line running through Jabal Ḍīn.[7]

Early Reconstruction

After the early foundation of the Great Mosque on the instruction of the Prophet, it underwent alterations and additions on three occasions during the next three hundred years.

Late 1st/early 8th century

When the Umayyad caliph, al-Walīd b. 'Abd al-Malik b. Marwān (86-96/705-15) appointed Ayyūb b. Yaḥyā al-Thaqafī as governor in Ṣan'ā', the latter received a letter with instructions to enlarge the Great Mosque. Ayyūb enlarged the mosque by extending it on the north side—'he extended it from its first *qiblah* to where its *qiblah* is now,' as Rāzī describes it, writing in the 5th/11th century.[8] Rāzī quotes from one source that after the building of this extension the *qiblah* was a cubit and a half off the true direction to the right. The same writer mentions that Ayyūb included a *miḥrāb* in the new northern wall,[9] containing decorations and inscriptions. These were removed by the Qāḍī of Ṣan'ā', Yaḥyā b. 'Abdullāh b. Ismā'īl b. Kulayb, who died in 341/952-53 and who had insisted that such decorations would distract the Believers as they said their prayers.[10] This act of extending the area of the mosque necessitated the demolition of a tomb belonging to one of the prophets. Indeed it might well have been thus extended in order to cover the position of the tomb completely and, in this way, to prevent the tomb continuing as an object of veneration.[10]

1 Al-Rāzī, *Tārīkh Ṣan'ā'*, Damascus, 1974, fl. ca. 460/1073, 113, in what is almost the most accurate set of statistics of Ṣan'ā' which have come down to us. The same paragraph gives the number of baths as 12, as against 17 today. There are other, conflicting, statistics given by al-Rāzī, but those seem to be merely quotations from earlier sources which he includes for the sake of impartiality.
2 Al-Rāzī, *Tārīkh Ṣan'ā'*, 70, 75: al-Ḥajarī, *Masājid Ṣan'ā'*. 23. See above, p.52a.
3 *Tārīkh Ṣan'ā'*, loc. cit.; *Masājid Ṣan'ā'*, 24, 3.
4 *Tārīkh Ṣan'ā'*, loc. cit., suggesting also that Wabr and Abān worked together in having the Mosque built.
5 *Tārīkh Ṣan'ā'*, 81; *Masājid*, loc. cit.
6 See p.317b
7 *Tārīkh Ṣan'ā'*, 70, 73, 75-6 passim; *Masājid*, loc. cit. The rock is now one metre below ground level, its position being indicated by a later rock placed on top of it.
8 *Tārīkh Ṣan'ā'*, 85; *Masājid*, 24.
9 If correct this would make it one of the earliest *miḥrābs* built into a mosque. Cf. Piel, 'Manār', *EI*[1], III, 231.
10 Ibn Rustah, *al-A'lāq al-Nafisah*.

2nd/mid 8th century

Doors were provided for the first time in the mosque by the second 'Abbāsid governor, 'Umar b. 'Abd al-Majīd al-'Adwī.[11] From the Kūfic inscription still to be found in the courtyard of the mosque, we know that the third 'Abbāsid Caliph, al-Mahdī, gave instructions to his governor, 'Alī b. al-Rabī', in 136/754 to have the repairs carried out to the mosques of Ṣan'ā'. We can safely assume that the Great Mosque would be included in those mosques to have been repaired.[12]

3rd/late 9th century

A great flood swept through Ṣan'ā' in 262/875-76 and the Great Mosque was ruined completely.[13] In 265/878-79 extensive rebuilding took place, described as a new building commissioned either by Muḥammad b. Yu'fir or his son, Ibrāhīm.[14] All the timbers were of teak (*sāj*), while the main structure was of stone and gypsum. It was a large and impressive building.[15] The main point to bear in mind here is the installation of new timbers. Al-Rāzī, our main source, suggests that the flood damage made new timbers necessary, or that they were installed after the damage done to the Mosque by 'Alī b. al-Faḍl after his second conquest of Ṣan'ā' in 299/911-12.[16]

The great flood of 262/875-76, therefore, may have been the cause of the replacement of the timbers and other major works in the mosque. It may, however, have been caused by the wanton damage done to it by 'Alī b. al-Faḍl, after his conquest of Ṣan'ā' in 299/911-12, when he is said to have flooded the mosque so that 'the water . . . filled the building up to the ceiling'.[17] We also cannot exclude the possibility that both events actually took place and that the Great Mosque therefore suffered two serious floodings in a period of just over thirty years.

That the walls of stone and gypsum may date from an earlier period is suggested by Ibn Rustah, who visited Ṣan'ā' ca. 290/903, when he stated that the large mosque he saw was 'built at the command of the Apostle of God in his lifetime'—had such a fundamental part of the building as the main walls been erected within the preceding twenty-four years he could hardly have failed to have known about it.[18] Al-Janadī's assertion that traces of the level to which water had risen in the mosque could still be perceived in his day (ca. 732/1331) confirms that no major rebuilding of the central part of the mosque took place between 299/911-12 and the 8th/14th century.

6th/12th century repairs carried out by the Ṣulayḥids

The Zaydī historian, Yaḥyā b. al-Ḥusayn, who died in 1100/1689, records that the Ṣulayḥid queen, Arwā bint Aḥmad, built the eastern side (*al-Jānib al-Sharqī*) in the year 525/1130-31.

Certainly the structure of the mosque has been extended on the eastern side, but the statements that the work was done by the Ṣulayḥid queen should nevertheless be regarded with caution. Firstly, there is no record of such a rebuilding in the earlier historians who deal with the Ṣulayḥids.[19] Secondly, the inscriptions built into the eastern wall are undoubtedly pre-Ṣulayḥid,[20] as is the style of the five exterior doorways. In view of the omission of any reference to a Ṣulayḥid rebuilding in the earlier sources and in view of the antiquity of the inscriptions (nos. 4-10, infra), it might be suggested that any rebuilding of the eastern wall in Queen Arwā's days was of a minor nature, involving only repairs to an existing wall, and leaving the inscriptions intact. However, the magnificent ceiling of the whole eastern side was a major reconstruction which can be ascribed to the 6th/12th century with reasonable certainty. Some of the ceiling inscriptions in the northern hall are also datable to the Ṣulayḥid period, as is, almost certainly, the foliated Kūfic inscription above the central doorway on the outside of the northern wall, and hence, probably, the doorway itself.

The Fāṭimī Ṭayyibī Da'wah has a tradition independent of the Zaydīs concerning the Jāmi' which they call Masjid Ḥurrat al-Malikah which it is interesting to quote at this point. Sayadna Taher Saifuddin Saheb[21] says of al-Hurrah al-Malikah (Queen Arwā), 'She it was who extended the Jāmi' of Ṣan'ā', restored its structure, decorated (*zayyanat*) it and ordered that the names of all the Imāms, from 'Alī b. Abī Ṭālib up to the Imām of her age, be inscribed in it. So that was recorded/written on the north wall of al-Masjid al-Jāmi' by her order. Then it was removed (*kushiṭa*) in the days of Aḥmad b. Sulaymān (532-66/1138-71), the Imām of the Zaydiyyah, in tyranny (*baghy*), aggression, envy and oppression. It was put back with plaster (*jiṣṣ*) and *ashrāsh* (a plant of which shoemaker's or binder's paste is made (Steingass)) in the rule (*dawlah*) of Ḥātim b. Aḥmad b. 'Amrān b. al-Faḍl al-Yāmī. Then it was removed in the rule (*dawlah*) of the Āl Yaḥyā of the Ashrāf (Yaḥyā b. Ḥamzah ?) for that is the innate disposition of deviation and misguidedness. The names of the Imāms, on them be peace, are written on the ceiling (*saqf*) of that Jāmi' *up till now*, in Kūfic script, which is not noticed, as one of the brethren who (actually) saw it has verified to me.'

The Rebuilding of the Minarets in Ayyūbid Times, 569-628/1173-1231

At least one of the minarets seems to have been in existence in 299/911-2, although whether in its present form is uncertain.[22] The minarets which now exist were repaired in 603/1206-7, according to two inscriptions preserved in their walls, which indicate that both were rebuilt by the Ayyūbid amīr, Wurdashār b. Sāmī.[23] Al-Ḥajarī, whose source is Janadī's *Sulūk*, tells us that Janadī confirms the 'building' of the minarets in Ayyūbid times and adds that the ablution rooms (*maṭāhīr*) were built by Qāḍī al-Sariyy b. Ibrāhīm al-'Arashānī who died in 626/1228-29.[24]

The Renovation of the *Miḥrāb* in 665/1266-67

Al-Ḥajarī[25] states that he saw above the *miḥrāb* in the Great Mosque a plaster inscription which indicated that it was remade by Qāḍī Ḍiyā' al-Dīn 'Umar b. Sa'īd al-Rabī'ī in 665/1266-67. There is no longer any sign of such an inscription above or near the *miḥrāb* as it is at present, though it is clear that the *miḥrāb* and its surrounding area on the northern wall have been recently redecorated and replastered. Al-Ḥajarī compiled his book,

11 *Tārīkh Ṣan'ā'*, 87.
12 Cf. *Inscriptions* below p.348a, and plate 46a.
13 *Masājid*, is mistaken in dating the flood in the year 265/878-79.
14 See above, chap.7, *The period of the Yu'firids.*
15 *Tārīkh Ṣan'ā'*, 86, one Ms. reading in the footnote; *Masājid*, 26-27; Ibn Rustah, op. cit., 110. This geographer wrote about 290/903 in the Yu'firid period.
16 See above, *Yu'firids*,
Al-Janadī, who died in 732/1331-32 and who was clearly strongly anti-Fāṭimid and opposed to 'Alī b. al-Faḍl and his cause, tells the story of the flooding of the Great Mosque in 299/911-12 in great detail. The conquest of the city by 'Alī b. al-Faḍl coincided with a period of heavy rains. As his followers pillaged the town, 'Alī himself, reports Janadī, stopped at the Mosque and ordered all the water drainage spouts (*mayāzīb*) to be blocked up. All the women captured in Ṣan'ā' were brought to him in the Mosque and, naked, made to enter the water trapped inside the building, while 'Alī b. al-Faḍl looked on from the minaret. Those virgins who pleased him he deflowered in the minaret.
If we can believe this story, the existence of a minaret as early as this date is interesting and important. Cf. Janadī, *Sulūk*, in Kay, *Yaman*, London, 1892, 144-45 (Arabic), 199-200 (translation).
17 Kay, 200.
18 p.128a
19 The statement is made in *Ghāyat*, 295. Cf. e.g. 'Umārah, in Kay, *Yaman*, 40-41, who describes the Queen's building feats in Dhū Jiblah in some detail. Cf. also Lewcock and Smith 'Two mosques', *AARP*, III, London 1973.
20 See below, *Inscriptions*, p.349a,pl.18.55
21 *Ghurrat al-ḥaqq*, Sanat 1344 H., reprinted Bombay, 1387 H.
22 Janadī, op. cit., 144-5 (Arabic), 199-200 (translation).
23 *Inscriptions*, p.348b,pls.18.50-51
24 *Masājid*, 28.
25 *Masājid*, loc. cit.

18.1 The Great Mosque. Aerial view.

Masājid Ṣan'ā', in the period after 1358/1939-40 and these renovations on the *miḥrāb* and its wall clearly were carried out since that time. It seems that the inscription he refers to here was plastered over during this renovation. One further complication is that there appear to have been, at various dates, three *miḥrābs* built into the northern wall of the Great Mosque.

The Renovation of the Ablution Room and the Water Reservoir

According to the *Masājid* the ablution room and water reservoir (*birkah*) were renovated by Imām al-Nāṣir Ṣalāḥ al-Dīn Muḥammad (773-93/1372-91). His only source for this statement, however, is an Imām of the Great Mosque early in the 14th/late 19th century, 'Abd al-Razzāq b. Ḥasan al-Ruqayḥī.

The Repair of the *Minbar*, 984/1576-77

The *minbar* of the Great Mosque was repaired by the Ottoman governor, Murād Pāshā in 984/1576-77. This is attested by an inscription carved in the *minbar* itself.

Subsequent Rebuilding of the Mosque

There are no subsequent references in the histories to substantial rebuilding until the Ottoman governor Sinān Pāshā rebuilt the small building called simply the Qubbah in the courtyard, and repaved it, in 1012-16/1603-08. Only in the twentieth century was further extensive rebuilding undertaken, according to the historians, and this affected only the southern hall, over which was constructed a library, necessitating a new row of columns on the southern side of the courtyard. This work was done by Imām Yaḥyā in 1355/1936-37. He further strengthened the roofs of the eastern and western halls so that they could be used for prayers when the mosque was full, and constructed a staircase up to them in the south western corner.

The Architecture of the Great Mosque

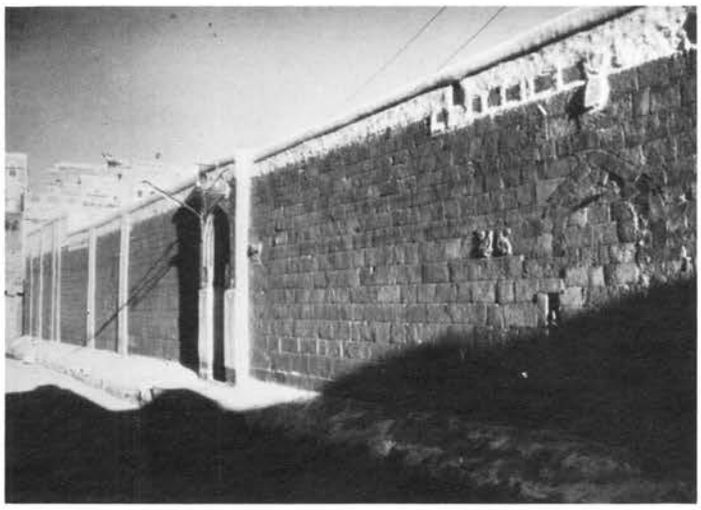
Externally the mosque is a rectangle of high stone walls, broken by only one opening on each of the north and south sides, by three openings on the west, and by four on the east (pls.18.1-8 and 18.58)

The *walls* measure slightly less than 66m by 78m, and are built of two facings of squared basalt stones ranging from 68cm wide and 53cm high to 31cm wide and 35cm high with a central packing of rubble.[26] It is possible that some of the basalt is re-used from a previous building. The stonework is laid in the curious manner practised in the Yemen in early Islamic times,[27] though still in use until a relatively recent date, in which the outer face of each stone leans slightly outwards, to create an apparent projection, or step, at the top, of approximately half a centimetre (pl. 18.6). Possibly this technique of laying the stones was meant to ensure greater stability if the foundations settled or if there were earthquakes. It has some resemblance to pre-Islamic stonework.

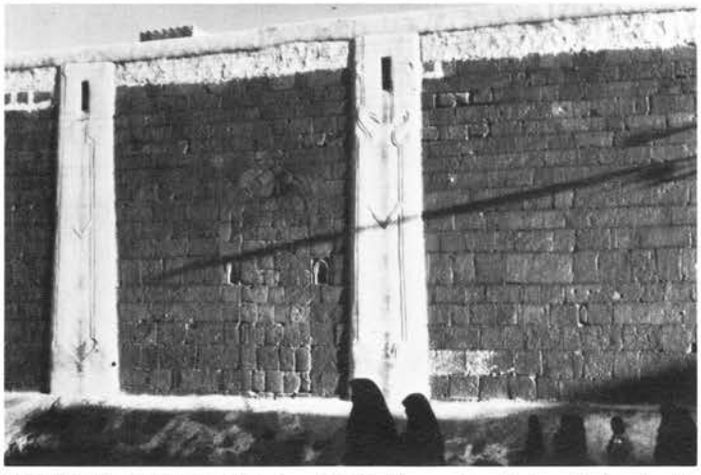
There are remains of a cresting of brick and plaster finials on the southern wall (pl.18.8). The ablution area lies to the west of the mosque.

26 'The extent of the *Jāmi'* from the south to the north is 127 cubits (*dhirā'*) and from the east to the west 104 arm-lengths (*madhra'*) by the iron cubit (*dhirā' al-ḥadīd*) known in Ṣan'ā', which is to say 66 2/3 cm.' (*Masājid*, 32.)

27 The style of the stonework in the Ghayl al-Barmakī, 182/798-9 is very similar (plate Cf. p.469b).



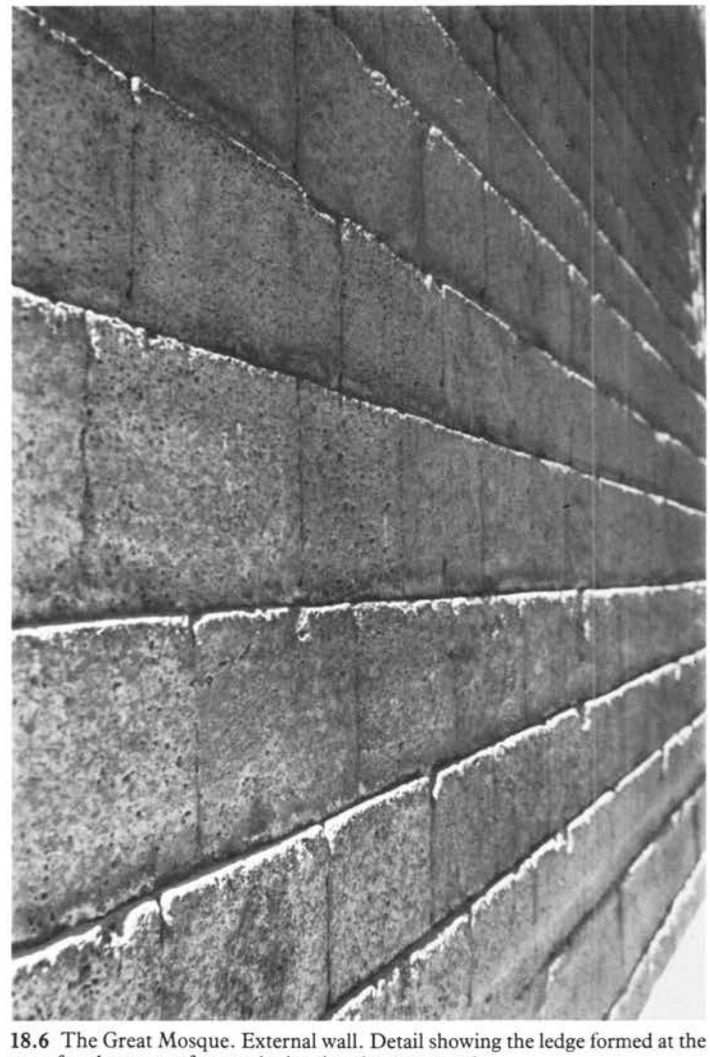
18.2 The Great Mosque. Exterior. The north, *qiblah*, wall. Note the central doorway and the blocked-up door on the right.



18.3 The Great Mosque. Exterior. Detail of the north, *qiblah*, wall, showing the vertical drainage chutes (*mashalah*) for rainwater from the roof.

18.4 The Great Mosque. Exterior. The south-west corner, including the domed tombs to the south of the western minaret.

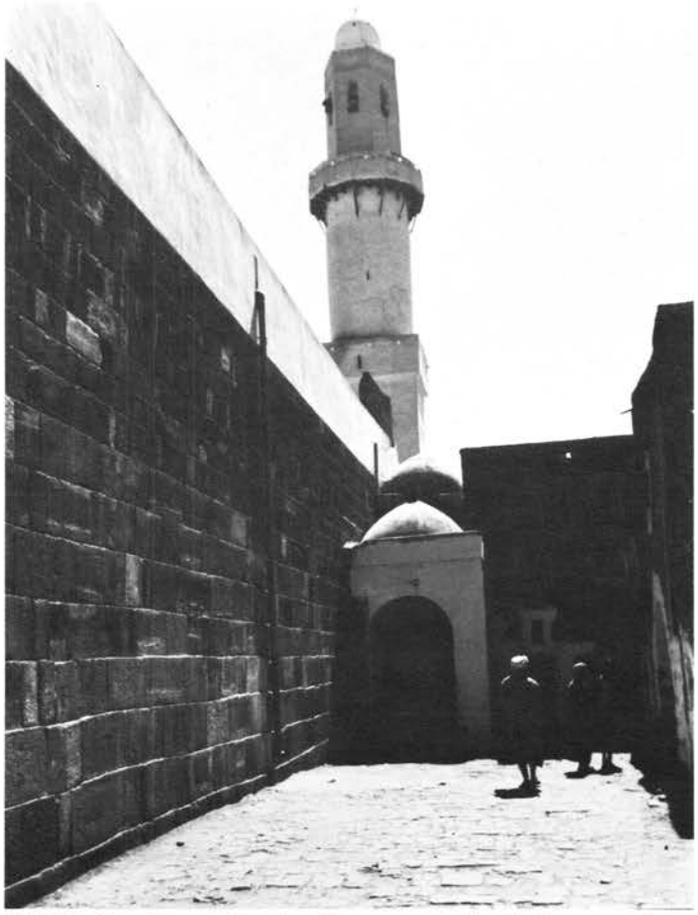
18.5 The Great Mosque. Exterior. The south-east corner. The stepped impression created by leaning out each course of stones is clearly visible.



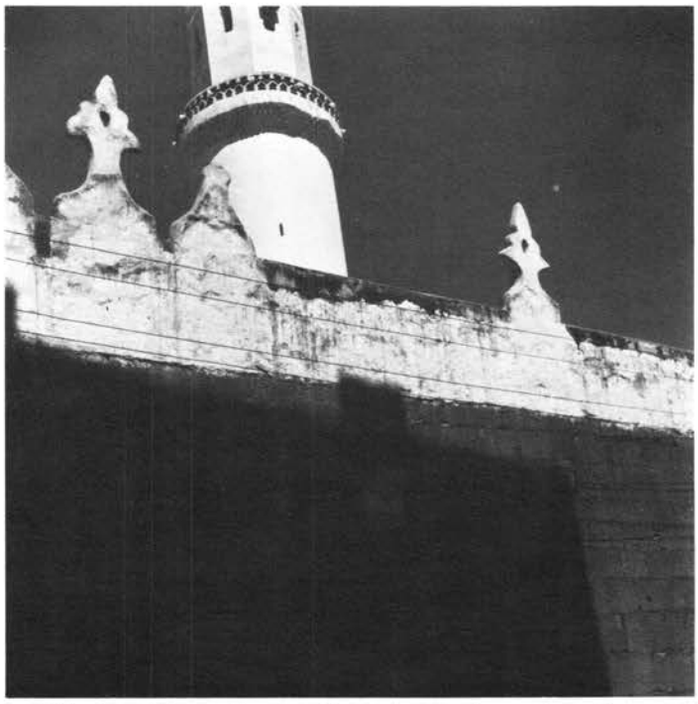
18.6 The Great Mosque. External wall. Detail showing the ledge formed at the top of each course of stones by leaning them outwards.

Within the walls are arcaded spaces on all four sides of a central courtyard (fig.18.1, pls.18.8-15). A monumental door with an early, carved wooden lintel (pl.18.18)is protected by a porch in the centre of the south wall. This leads into the southern hall which extends the full width of the building and is divided longitudinally into four aisles (pl.18.14). The western minaret projects into this space at the western end, while the eastern minaret blocks off the eastern corner of the courtyard.

A *miḥrāb* in the southern hall was destroyed in the reconstruction of 1355/1936-37. The upper part of it, somewhat damaged,



18.7 The Great Mosque. Exterior. The entrance to the ablution area on the north-western side.



18.8 The Great Mosque. Exterior. The parapet cresting on the southern, entrance, side.

is retained above the first arch to the east of the doorway in second arcade from the north (pl.18.19). It was replaced by a plain *miḥrāb* in the first arcade, also one bay to the east of the doorway.

The arcading rests on a great variety of columns taken from earlier buildings or made up from fragments (pls. 18.14-15, 20-21, 27-29). One column is even made by turning a pre-Islamic stone inscription on its side. The advantage of re-using stone columns and fragments, a practice followed elsewhere in the mosque, especially in the northern prayer hall, seems to have been that solid stone columns permitted the minimum obstruction of sightlines to the Imām leading the prayer against the *qiblah* wall.

When large stone fragments were not available, a circular pier of diameter 70 or 80cms was made up of a rough rubble core compacted with a thick layer of gypsum plaster. These piers tend to predominate on the eastern and western sides of the south (and north) hall, and are used without exception in the two outer arcades of the eastern and western side halls of the mosque. Traces of the wooden tie-beams which originally joined the arches, but which were cut at some later date, have been found during recent restoration.

The side halls are entered without interruption from the southern hall. But after a short distance, approximately 12 metres on the west and 8½ metres on the east, walls cross the arcades to close off the southern part of the building from the northern. Both these crosswalls contain *miḥrābs,* that on the east is a plain niche, while the western *miḥrāb* has a richly embellished surround (pl.18.22).

Small doors near the *central* courtyard penetrate the cross walls to link the southern and northern areas of the mosque. There is also access through doorways[28] from the street on the east, and through a single doorway from the ablution area on the west. The eastern doorways have angled reveals, which line up with the line of the east to west arcades, and counteract the angle of the eastern wall. The arches of the doorways on the outside are pointed horseshoe arches, with the bottom voussoirs acting as impost blocks and projecting past the reveals by 3cms (pl.18.23).

In the south western corner of the mosque are four tombs. One, now closed, is under a dome to the south of the ablution area (pl.18.4). According to al-Ḥajarī, 'it is known as the *qubbah* of al-'Awsajah and is the grave of the Imām al-Qāsim al-Mukhtār son of Imām al-Nāṣir Aḥmad, son of the Imām al-Hādī Yaḥyā who died at Dhū Marmar in 728/1327-28. Then the people of Ṣan'ā' after a short time transferred his grave to the side of the Jāmi', and at his side is the grave of his son the Imām al-Muṭahhar b. Muḥammad b. al-Muṭahhar, who died in the year 781/1379-80 and the grave of Sīdī Yaḥyā, son of the Imām Muḥammad al-Muntaṣir'[29] son of the Imām al-Qāsim al-Mukhtār buried in the grave mentioned above, who died in 729/1328-29. Finally there is the grave of Sīdī Muḥammad b. Idrīs b. 'Alī b. 'Abdullāh al-Ḥamzī, who died in 714/1314-15[30] Of these tombs, the best preserved is the last, approached through a richly decorated door from the ablution area (pl.18.24).

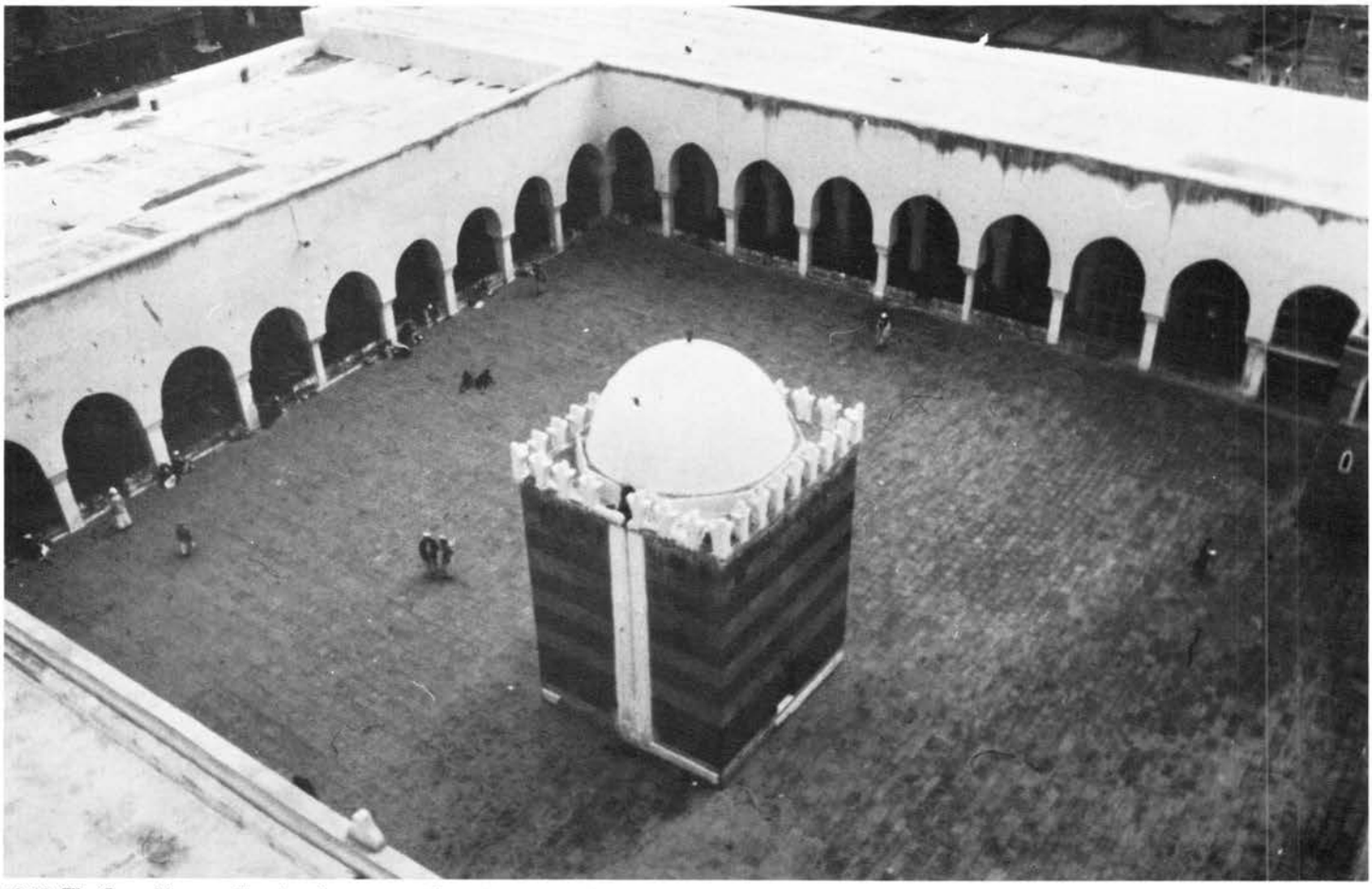
On the north side of the western minaret is another and very early tomb, reputedly that of the Prophet Ḥanẓalah b. Ṣafwān.[31] Al-Ḥajarī[32] describes what he calls a 'structure' of baked brick and plaster above the tomb and separate from the minaret, although this is now incorporated into it. Perhaps this was a crude form of dome. A small arch is preserved in the wall of the minaret, probably the original opening to the tomb, blocked in the 11th/17th century (pl.18.25).

In several of the western corners are banks of students' lockers for books, roughly built up in brick and plaster and closed with small wooden doors.

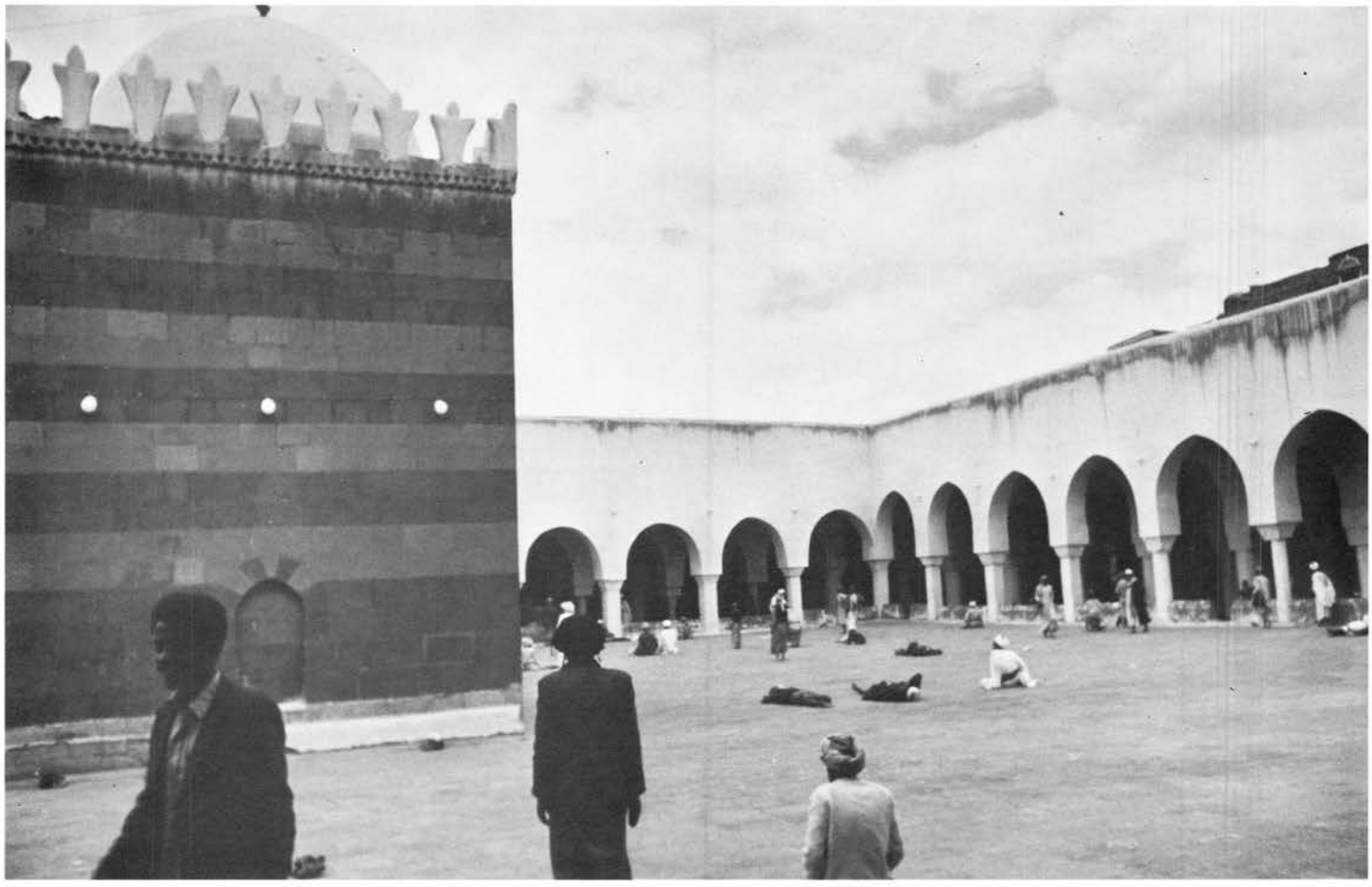
The northern halls: The eastern and western sides of the central courtyard are flanked by halls of three-aisle width which open into the northern prayer hall without a break. The two outer arcades have plain round piers. The arcades onto the courtyard

28 Originally two, one is now blocked.
29 *Masājid,* 30.
30 Author of *Ghallat al-ṣādī 'alā madhhab al-Hādī* (ibid, loc. cit.).
31 Mentioned by al-Rāzī, op. cit. There are at least four other tombs reputed to be his in various parts of Arabia, one of which is west of Bōr in Wādī Ḥaḍramawt. Ḥanẓalah is a pre-Islamic prophet.
32 Op. cit., 30.

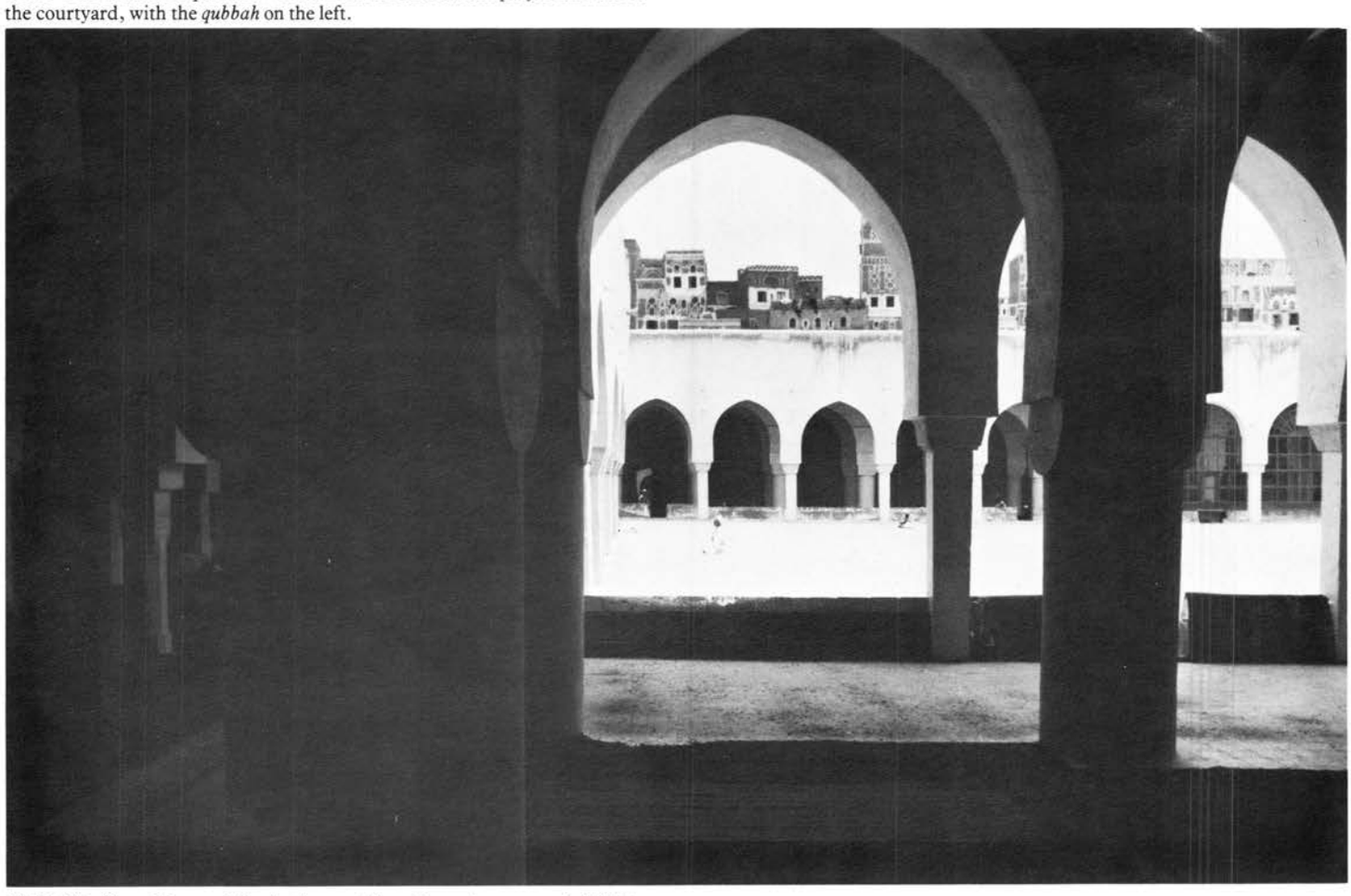
18.9 The Great Mosque. View into the courtyard from the eastern side.



18.10 The Great Mosque. View into the courtyard from the western minaret, with Sinān Pasha's Qubbah in the centre.



18.11 The Great Mosque. View of the northern and eastern prayer halls across the courtyard, with the *qubbah* on the left.



18.12 The Great Mosque. View in the court from the western prayer hall. Note the ancient column and capital in the northern prayer hall on the left.

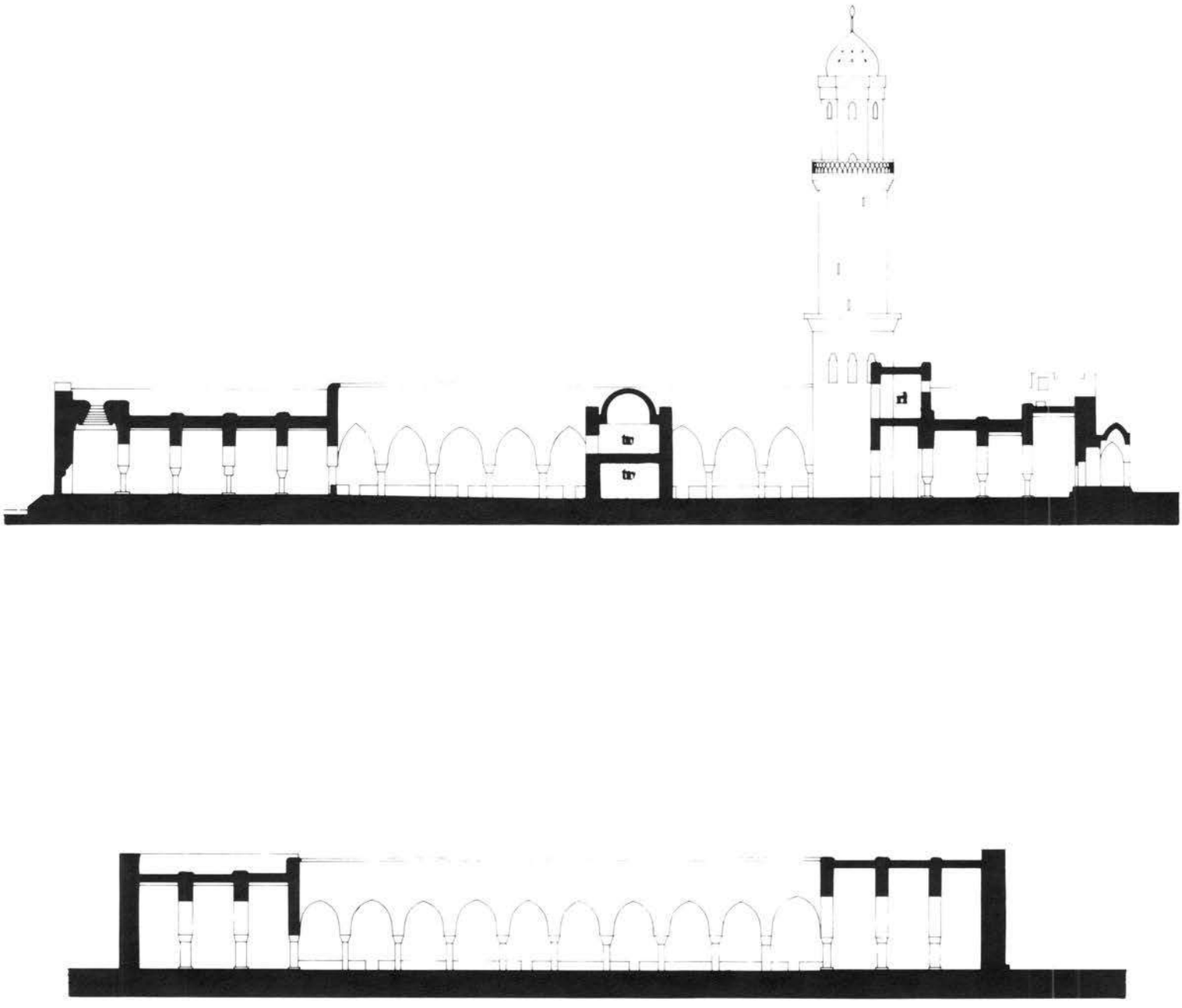
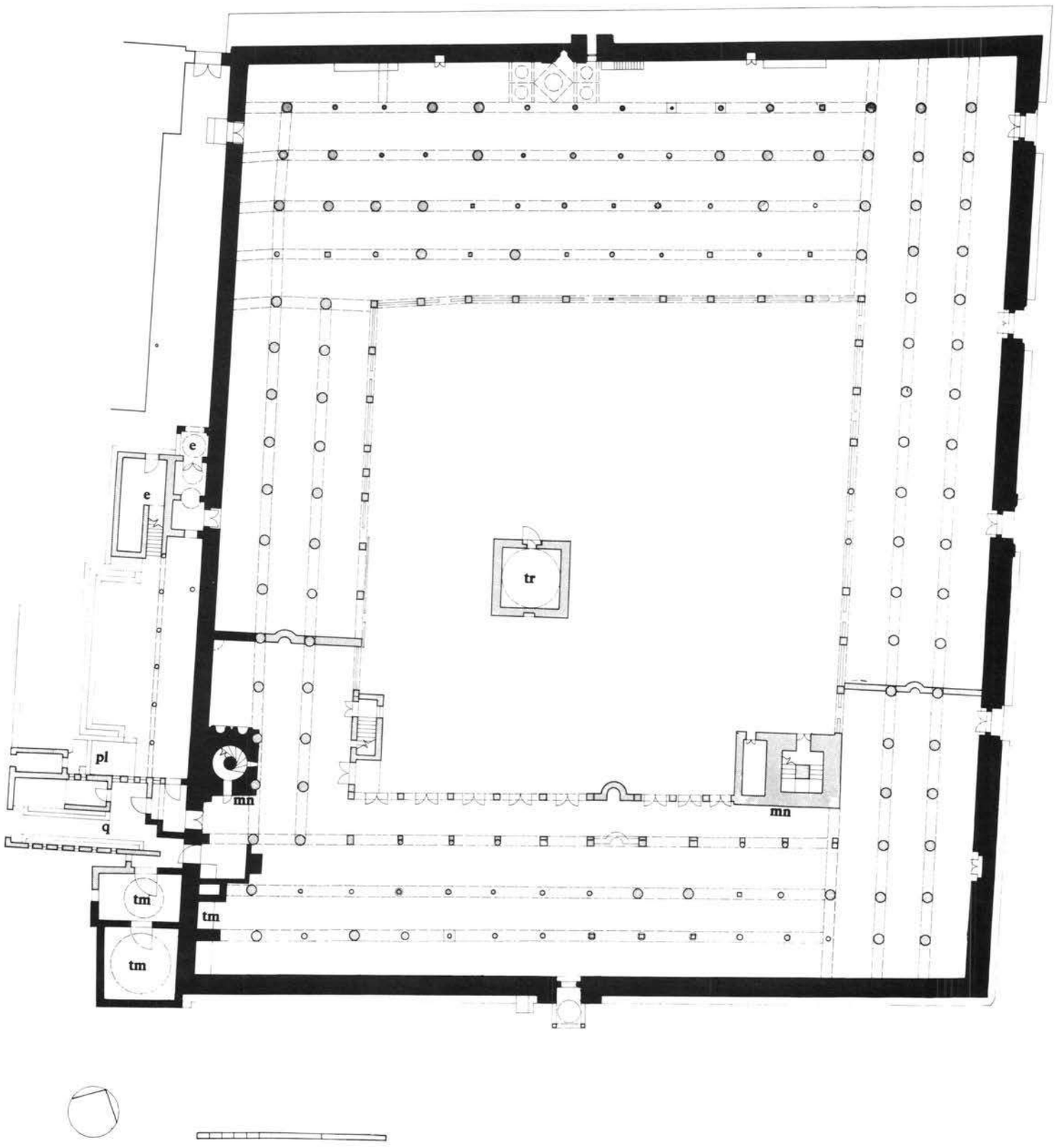


Fig. 18.1 The Great Mosque. Plan and sections.

Key to all figures

a animal stalls
b bathroom
br boiler
c court
cu court upper level
ch changing room
d *dīwān*
e entrance hall
eu entrance hall upper level
f warm room
fr furnace room
g grinding mills
gh *ghayl*—water level
h excrement room
hr hot room
j grain and fruit store
k kitchen
l lobby
lt laundry terrace
lb lavatory/bathroom
m *mafraj*
mn minaret
n *miḥrāb*
nw washing floor
o loading and mounting animals
or restaurant/eating place
p passage
pl pool
plr cold pool room
q public ablution area
r room—general use and sleeping
rr reception room and business
rl library
s store
sh sheep pens
sp shop
t terrace
tm tomb
tr treasury
u shaft
v rain water cistern
vm man in charge
w well
wb water cooling box
wr well ramp
x *minbar*
y women's room and wardrobe
z *manẓar*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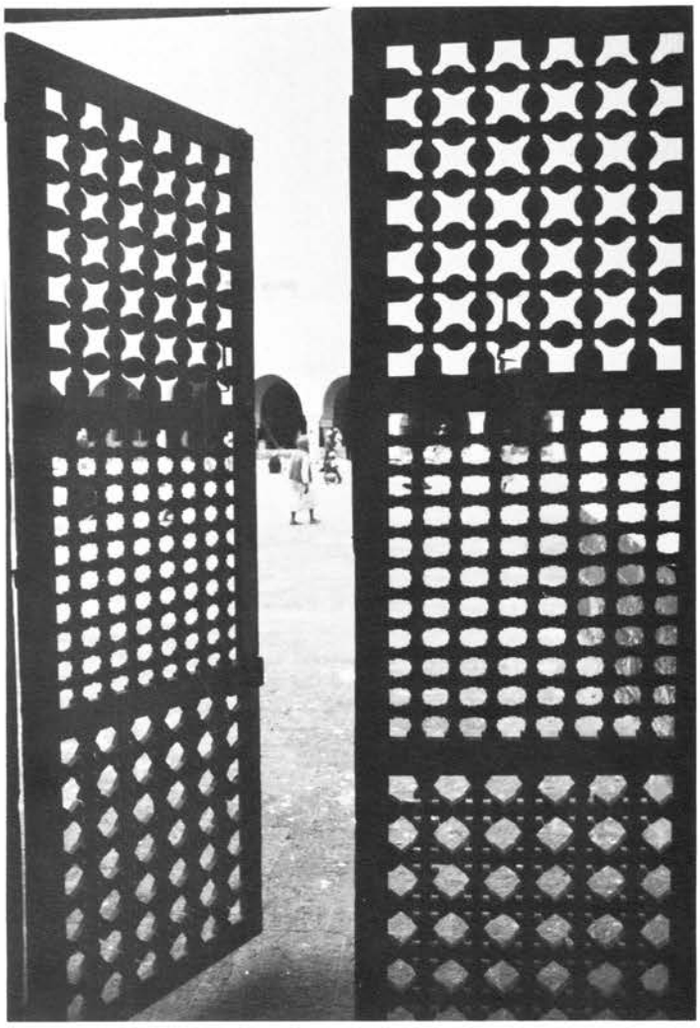


18.13 The Great Mosque. Old wooden screen doors in the southern prayer hall.

18.15 The Great Mosque. The eastern minaret seen from the northern side of the court. Note the relatively modern reconstruction to the right, with Imām Yaḥyā's library above.

18.14 The Great Mosque. The southern prayer hall with its plaster stripped during complete replastering in 1974.

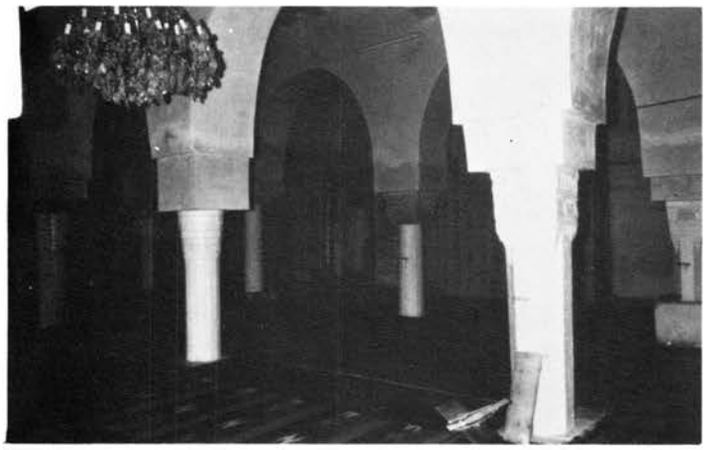
18.16 The Great Mosque. The northern prayer hall, with many columns and capitals of pre-Islamic date.

are quite different, having for the most part plain square columns made of single large pieces of stone. Those in the western hall have plain capitals, those in the eastern hall have curious, roughly-carved capitals in vaguely-shaped leaf forms (pl.18.15). In the centre, however, is a re-used pre-Islamic circular column standing on an upturned capital and carrying another of different design (pl.18.27). The shaft of this column is entirely covered with an entwined ornament with a central belt of twisted strapwork, while the capitals are of vague composite type with stylized acanthus leaves. It seems likely that the shaft and the capital did not originally belong to each other.

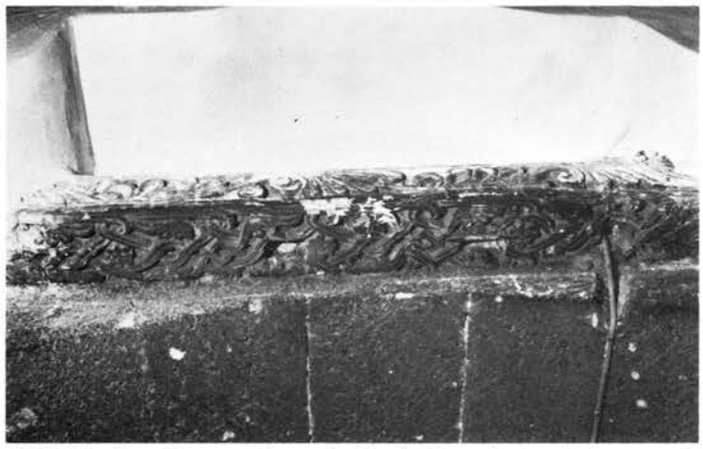
The column adjoining this on the south is also circular, a sixteen-sided polygonal shaft of pre-Islamic type.

The northern hall has five aisles, the four northern arcades of which are similar to those of the southern hall, with an assortment of pre-Islamic stone columns, and sometimes capitals, in the centre, changing to larger circular piers with rough cores at the western and eastern ends of the hall (pls.18.12,16,17,29).

The southern row of columns, on the courtyard side, are square single-stone slabs with plain capitals, like those flanking the western side of the courtyard, with the single exception of the column in the north western corner, which has a pre-Islamic (?) capital of bold conventionalized Corinthian type (pl.18.16). There is another similar capital in the third arcade of the northern

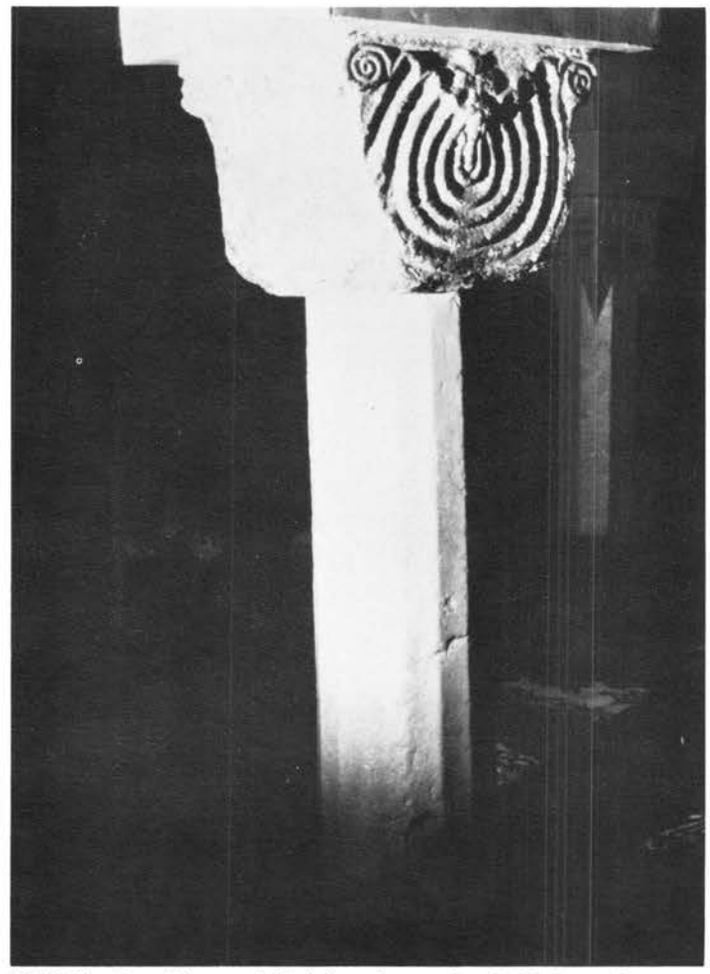


18.17 The Great Mosque. The northern prayer hall.

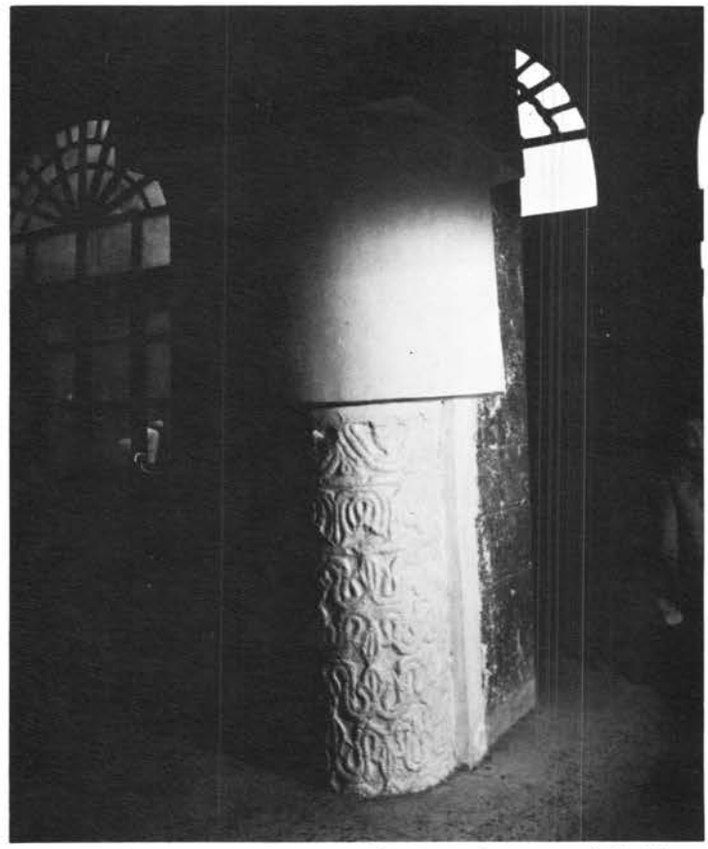


18.18 The Great Mosque. The wooden lintel of the main door in the centre of the south facade. In an ancient style, it contains, among vine tendrils and leaves, rosettes and what appear to be foliated Latin crosses.

18.19 The Great Mosque. The remains of an old *miḥrāb* in the southern prayer hall during redecoration in 1974. Note the panelled ceiling.



18.20 The Great Mosque. A Christian column and capital in the southern prayer hall, bearing a Greek cross in the centre of each side.



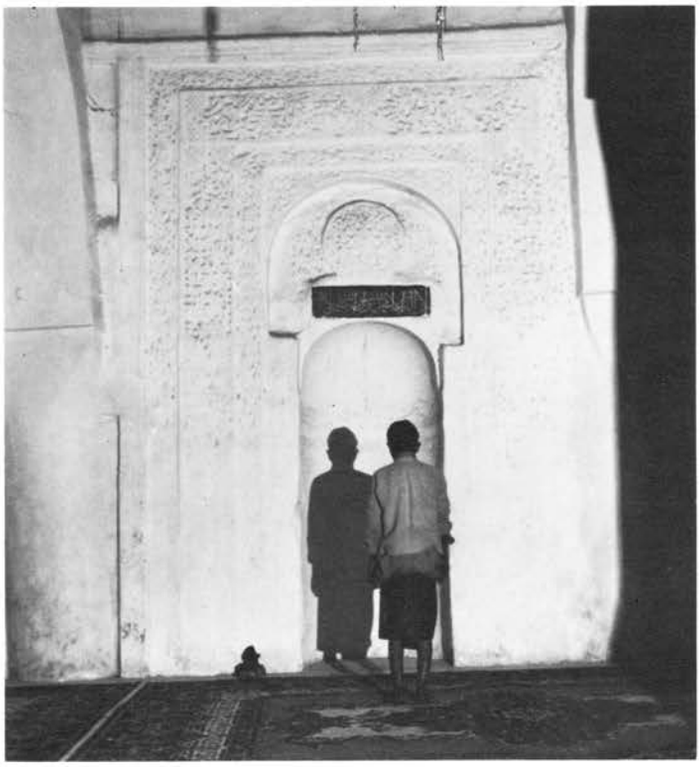
18.21 The Great Mosque. A column shaft in the southern prayer hall, with an overall vine pattern, probably early Islamic.

prayer hall.

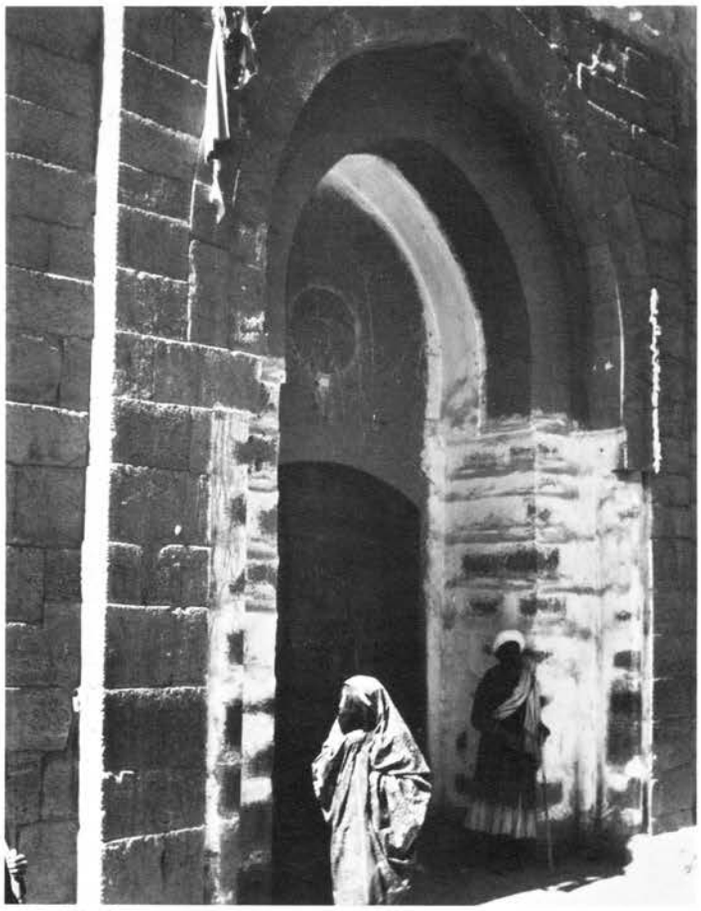
The *qiblah* wall has the *miḥrāb* more than five metres to the west of the centre. The upper mouldings of an earlier *miḥrāb* remain on the wall two bays further east (pl.18.30).

The decoration and calligraphy of the present *miḥrāb* are very crude; it is modern work (pl.18.31). Its position, however, is probably quite close to that of the original *miḥrāb* of the mosque. This may be deduced from the fact that the large dome of the ceiling, described below, has a centre-line which is only slightly to the west of it.

To the west of the *miḥrāb* are two superimposed bands of splendid *naskhī* script nearly 14m long, each band being approximately 25cms high (pls.18.32-33). These inscriptions contain two raised bosses of a type roughly contemporary

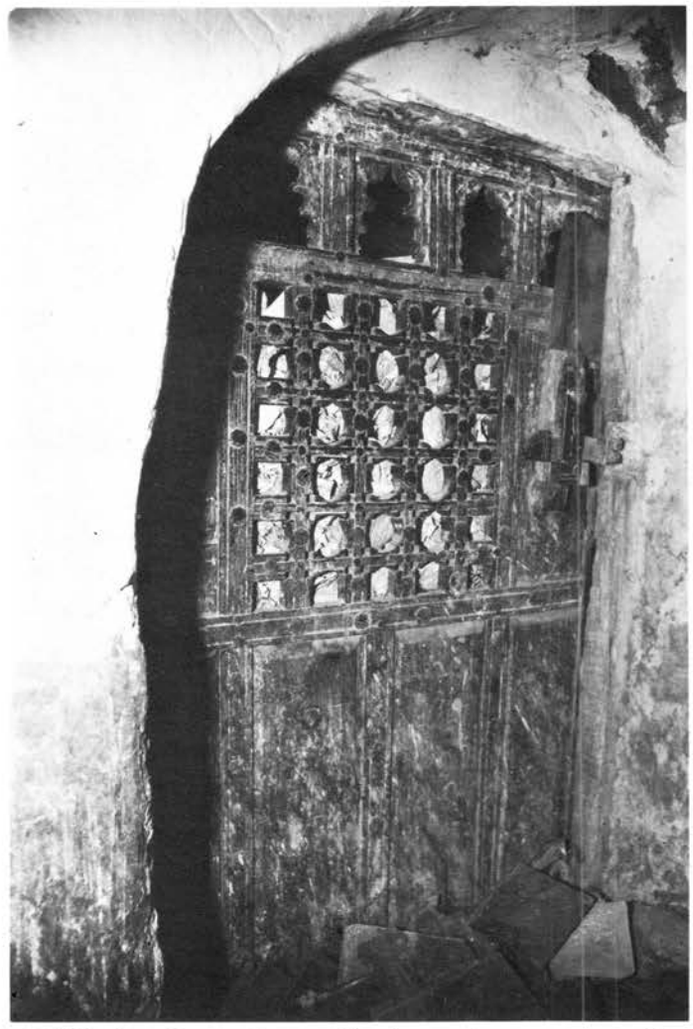


18.22 The Great Mosque. A prayer niche in the western arm of the southern prayer hall.



18.23 The Great Mosque. One of the eastern doorways in the external wall. Note the slight horse-shoe shaping of the arches.

with the Ṭāhirids (10th/16th century). The end of the inscription was altered at a later date to accommodate a reinforcing arch. Below the eastern end of this big inscription there is a later, shorter one.



18.24 The Great Mosque. A screen of wood across the entrance to one of the domed south-western tomb chambers.

18.25 The Great Mosque. Traces of the plaster niching in the north wall of the western minaret, now removed.

To the east of the present *miḥrāb* is the wooden *minbar*, repaired in the year 984/1576, according to an inscription over its gate, by the Ottoman governor Murād Pāshā (pl.18.30). On the wall behind the *minbar* and to the east is another short inscription in plaster relief; this is above the remains of the eastern *miḥrāb*.

Between the *minbar* and the *miḥrāb* is the door through which the Imām entered the mosque, the door itself plated with metal of pre-Islamic design and workmanship containing Ḥimyaritic

18.26 The Great Mosque. Horseshoe arches on double columns executed in plaster in the north wall of the eastern minaret, now removed. (Photo: P. Costa)

18.27 The Great Mosque. Pre-Islamic or early Islamic column and capital in the eastern prayer hall, with an overall vine pattern.

inscriptions (pl.18.34).[33]. The three doors of the northern end of the eastern range resemble those further south in having angled reveals externally, surmounted by pointed horseshoe arches which are slightly narrower at their bases than the reveals below (pl.18.23).

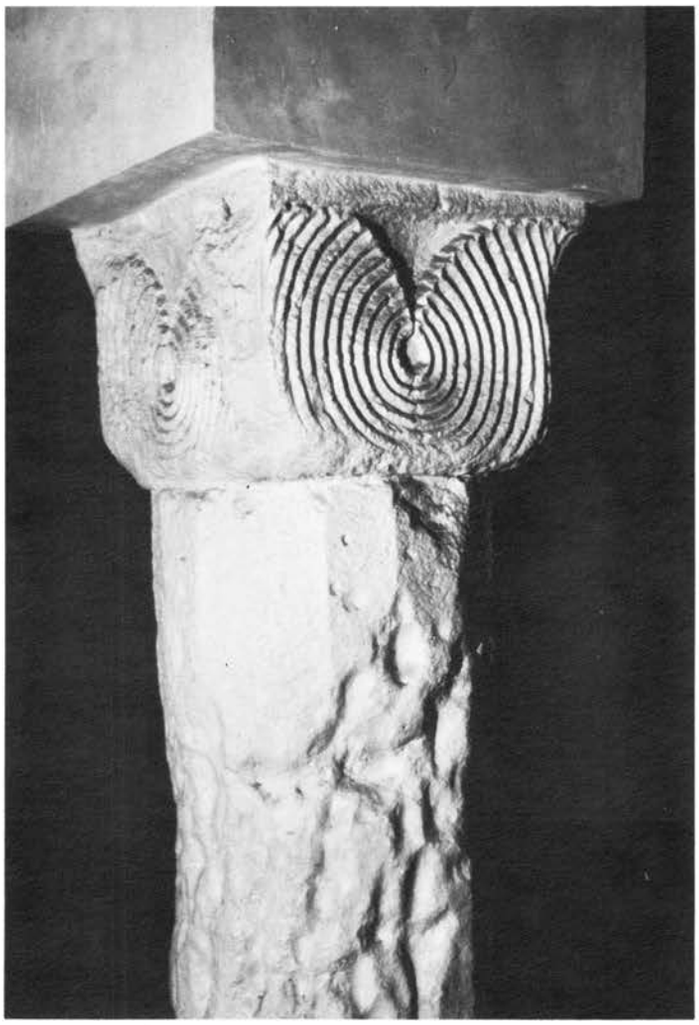
18.28 The Great Mosque. Pre-Islamic capital in the eastern prayer hall. The original Greek crosses in the centre of each side have been chipped away.

The Ceilings: All of the ceilings of the mosque are of wood. Those of the northern and southern halls vary from 4.50 to 5.80m in height to the soffit of the beams, those of the eastern and western halls are higher, the eastern 6.55m and the western 6.11m. The construction of most of the ceilings of the southern and northern halls is a series of beams approx. 20cms square in cross-section running north-south (that is, between the arcades, which run east-west) supporting a series of small cross beams which carry infilling panels of wood. In some cases the latter are decorated, in others not. The decoration usually takes the simple form of a square recess turned diagonally to the surrounding frame of beams, with a painted star or circle within it (pl.23). Painted inscriptions, some of them in Kūfic script, cover many of the beams of the first, second and third aisles from the *qiblah* wall in the northern hall (pl.22).

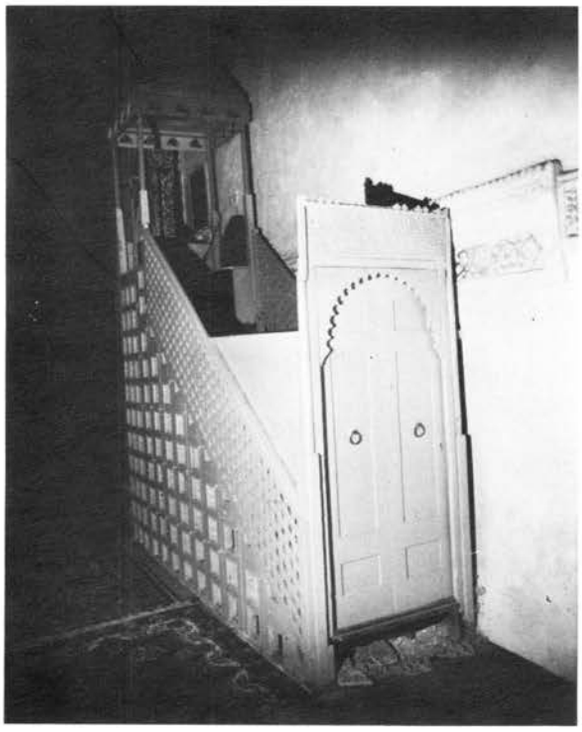
The main exceptions to this type of ceiling are the ceiling in the first bay in front of the *miḥrāb* and to the west of it, and the ceilings of the last four bays to the west in the northern hall (omitting the most northerly bay, which conforms to the type typical of most of the mosque).

The ceiling in front of the *miḥrāb* and to the west of it is composed of a large corbelled flat 'dome', or 'lantern', flanked on either side by a pair of smaller flat 'domes' (pls.24,18.35). On close examination the corbelling is seen to be made of large flat pieces of wood resting on beams, while the flat circular 'dome' or 'lantern' in the centre is of ancient alabaster, long since turned

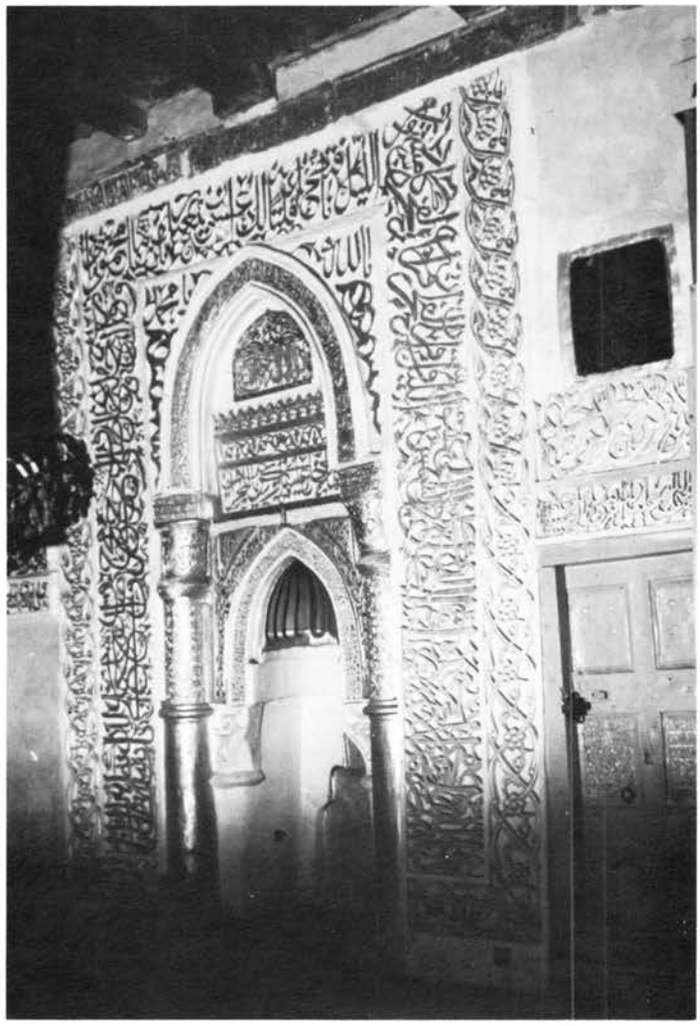
33 Cf. pp. 337, 346a



18.29 The Great Mosque. Capital and polygonal column shaft in one piece in the northern prayer hall from an ancient South Arabian building. The base is an inverted capital of later pre-Islamic date.



18.30 The Great Mosque. *Minbar* in the north prayer hall.



18.31 The Great Mosque. *Miḥrāb* in the centre of the *qiblah* wall. Redecorated in the present century. Note the adjoining door, and the early Kūfic inscription on the wooden strip which runs right around the building under the beams.

18.32 The Great Mosque. Beginning of the *naskhī* inscription on the *qiblah* wall to the west of the *miḥrāb*.

black and thickly plastered over on the outside, but originally doubtless translucent so that the light poured in on the centre of the *qiblah* wall.[34] Two further beams were introduced at some subsequent date to help support the central 'dome', disguising the original appearance which was of a square placed diagonally in a square formed by beams, *qiblah* and arcade wall, from which the corbelling rose up. The whole 'dome' structure has parallels with similar constructions in Central Asia, which Benjamin Rowland thinks were probably invented in Persia[35] (pls.18.36,38). But three-corner brackets under the central 'dome', which have strong redolences of the pre-Islamic architectural style unique to the Yemen, remind us that we as yet know nothing of pre-Islamic timber ceiling constructions in this area (pl.18.37).

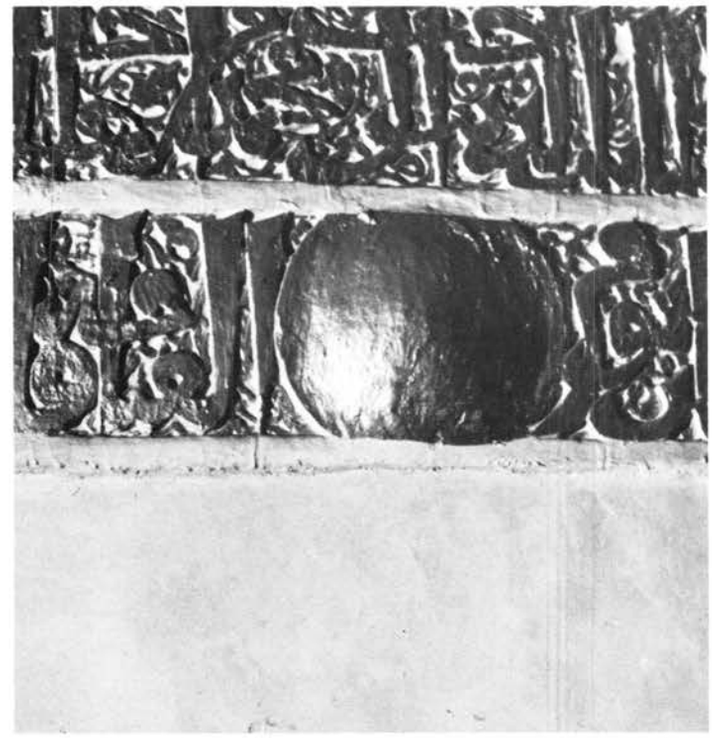
The last four bays in the south west corner of the northern hall are higher than the rest of the ceilings in the northern hall. At approximately 7m they are even higher than the ceilings of the eastern and western halls.[36] They consist of a palimpsest of fragments of decorated wood, some areas of which are certainly original ceiling panels complete with frame and beams (pls.25, 18.43). It is tempting to believe that some of the beams and panels remain in their original position, but it is impossible to be sure of this without detailed archaeological examination of the structure, impossible at present. Certainly, this theory would help to explain why only this one section of the ceiling should be so much higher, by allowing us to suppose that to stabilize the ancient structure later architects lowered the height of the rest of the ceilings.[37] It is possible that a restorer, centuries ago, allowed four bays of the original ceiling height to remain immediately adjacent to the western wall, and that into these bays were collected all the finest fragments of the original ceiling that were not decayed or eaten by insect-attack (pls.21,25,18.35-49).

The ceilings of the western and eastern halls are more richly decorated in carved and painted ornament than the bulk of the ceilings in the northern and southern halls. The ceiling of the eastern hall is the finer of the two (pl.18.48).

Throughout the eastern and northern halls, and in areas of the western and southern halls, long wooden Kūfic inscriptions run along the walls immediately below the ceiling beams. These are of two types (pls.18.41,49, fig.18.2). Those of the eastern, western and southern halls are in a rounded Kūfic; those in the northern hall are in a form of Kūfic which has borders and a hollowed-out central space to each letter.

The central courtyard: The central courtyard is roughly square, 38.5m from east to west and 40.3m from north to south on the eastern side. It is paved with stone, and contains a *qubbah* slightly off-centre, towards the south west. In the south eastern corner, against the flanking arcades, rises the eastern minaret.

The *qubbah* in the centre of the courtyard is a simple building 6m by 5m with walls of banded basalt and tufa, two storeys in height and surmounted by a plain dome (pl.20). There is no decoration internally, the function of the *qubbah* being to serve as a safe repository for precious books and records belonging to the Awqāf. In its present form it does not appear to have ever had any special religious or symbolic significance. There are two



18.33 The Great Mosque. Continuation of the *naskhī* inscription on the *qiblah* wall.

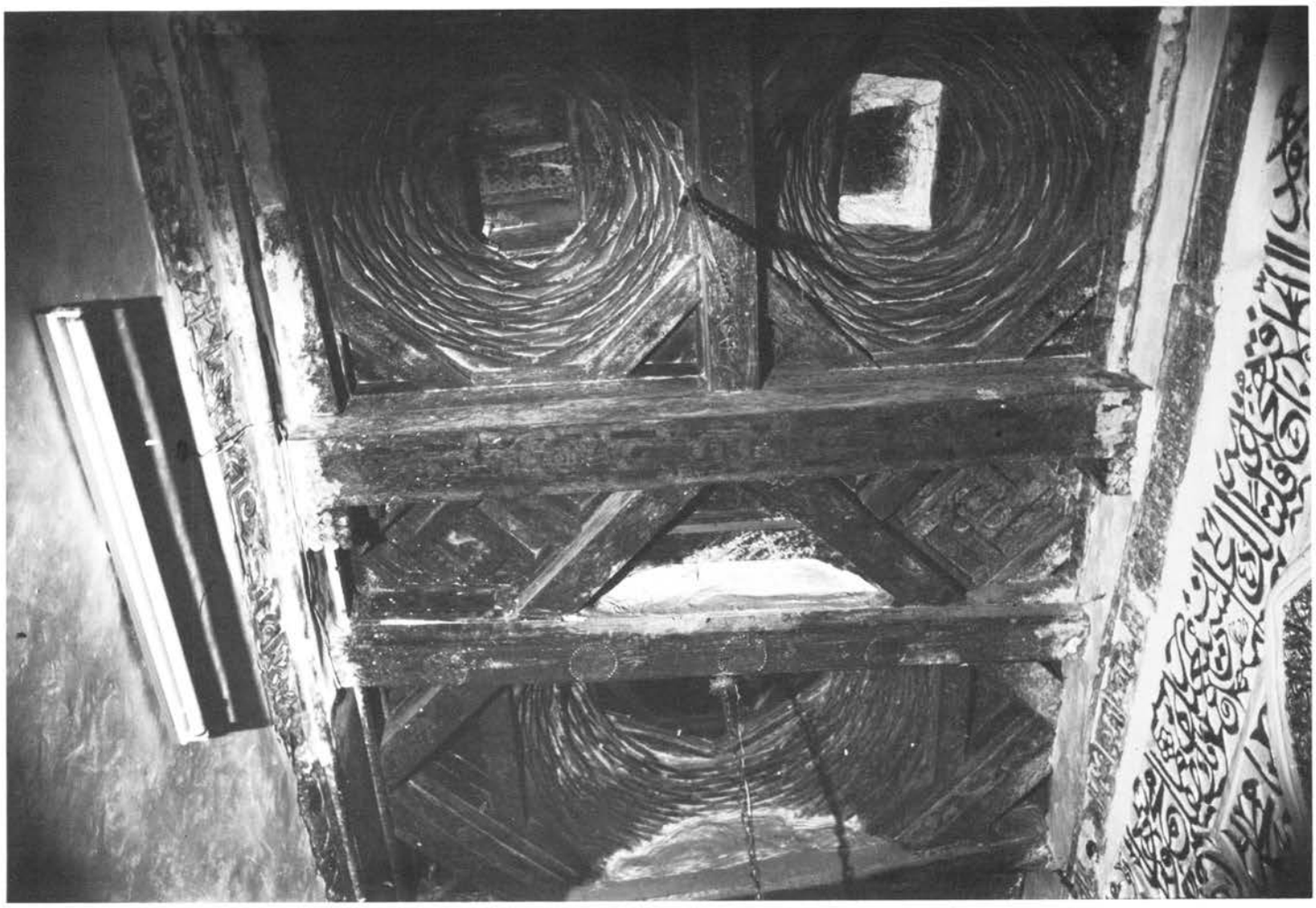
18.34 The Great Mosque. The door of the entry through the *qiblah* wall, to the east of the *mihrāb*. Covered sheet metal, the central panels of which have pre-Islamic inscriptions; the lower panels contain Byzantine arches characteristic of the sixth c. A.D.

34 The lanterns of al-Ṣarḥah mosque (ca. 2nd/8th century) were clearly also of translucent alabaster (cf. P. Costa, 'La Moscha Grande di Ṣan'ā'', *Annali dell' Istituto Orientale di Napoli*, 1974, XXXLV, 493). One is reminded that al-Hamdānī in his *Ṣifah* gives a description of the ancient palace of Ghumdān, which stood alongside the Great Mosque until destroyed in the early days of Islam, as having a ceiling at the top, of alabaster so translucent that one could see through it birds flying against the sky.

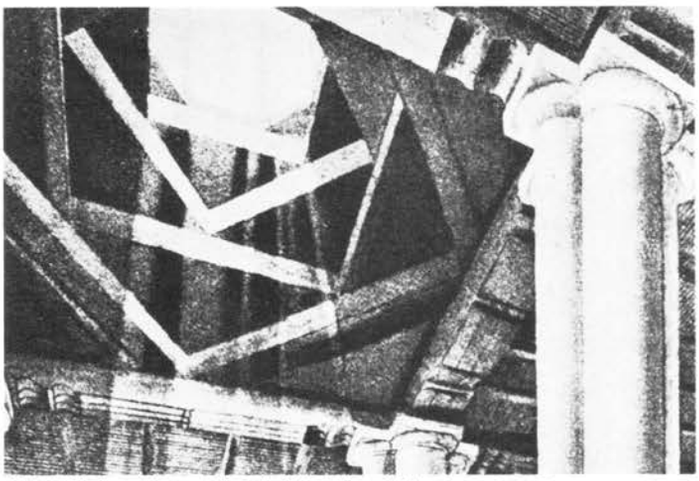
35 Benjamin Rowland, *The Art and Architecture of India,* Harmondsworth, 1967, 173.

36 The 1st/7th century mosques of Basrah and Kufah 'exhibited close affinities to Sasanian royal halls because of their very high ceilings.' D. Kuban, *Muslim Religious Architecture,* Leiden, 1974, I, 13.

37 In a space above this ceiling were found, during the recent restoration, large quantities of early manuscripts, many of them in Kūfic characters and dating from the early centuries of Islam. Included among this material, however, were more recent manuscripts and matter printed up to the end of the last century.



18.35 The Great Mosque. Another view of the alabaster skylights in front of the *miḥrāb*. The two beams strengthening the large skylight are clearly a later addition.



18.36 Turkmenistan. Nisā, hall in palace, 3rd to 1st c. B.C. Reconstruction of the wooden structure supporting the skylight lantern. (Photo courtesy: Pugachenkova)

18.37 The Great Mosque. Detail of the skylight lantern. Painted patterns and wooden brackets suggest a date in the early centuries of Islam.

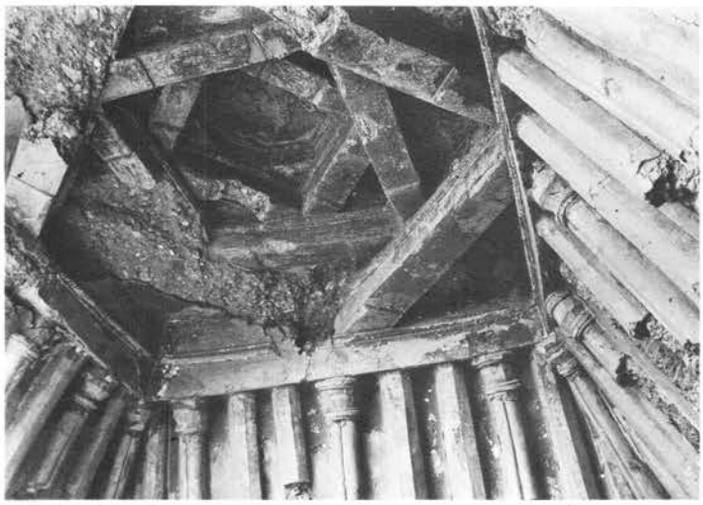
floors, each consisting of a single space, the upper one reached only by placing a moveable ladder on the outside wall.

The libraries: Above the south western arcades of the mosque there is a second storey, providing accommodation for the library of the mosque, and approached up a long flight of stairs from the south western corner of the courtyard.

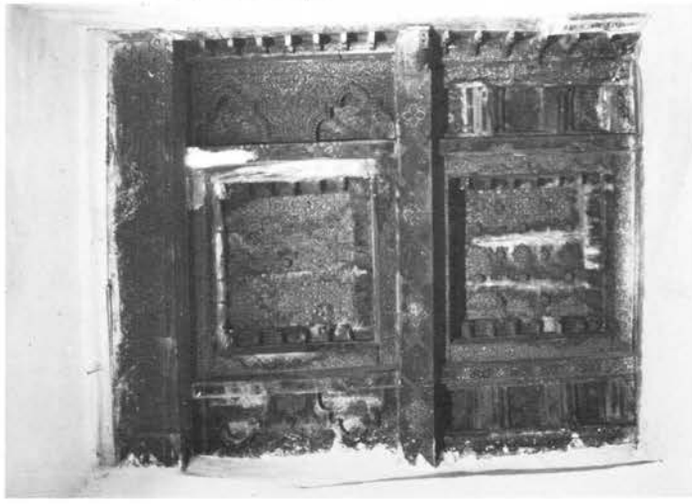
Along almost the full length of the southern side of the courtyard, above the arcades of the hall, there rises the dark grey facade of Imām Yaḥyā's library, a gift to the mosque added in 1355/1936-7. It is approached up a staircase from the south eastern corner (adjoining the minaret), or from the south western staircase of the other library (pl.18.15).

The minarets: The western minaret rises against the western wall, and thus penetrates the roof to emerge well away from the courtyard.

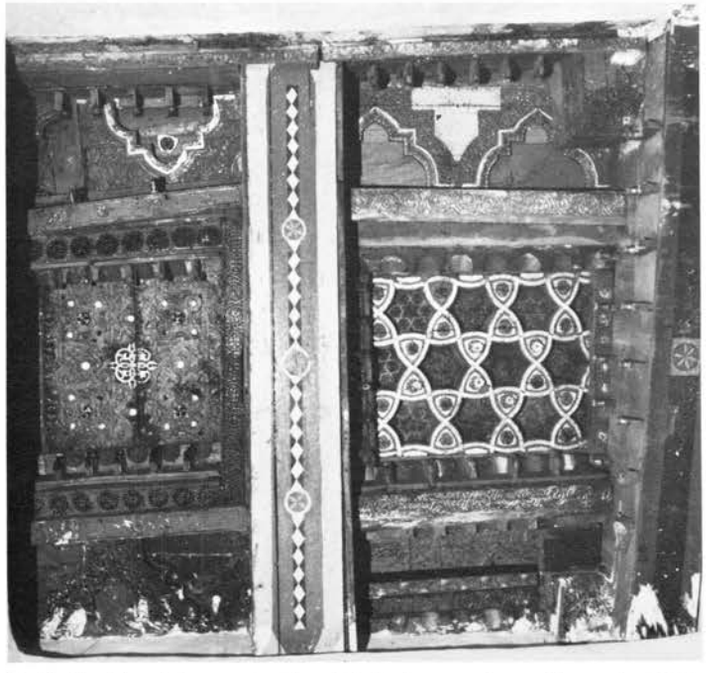
This minaret is approx. 4.25m square at the base externally, and internally is a brick cylinder approximately 2.75m in diameter tapering to slightly more than 1.5m in diameter at the top. It contains a central cylindrical brick core tapering from 1.08m to 0.75m. The whole construction appears to have been done at one period. Externally a square base rises from the paving of the mosque, passes through the roof and rises to a height of approx. 5.5m above it (pl.18.50). The cornice was originally decorated with pointed arches containing scalloped



18.38 Bāmiyān. Lantern roof c. 500 A.D. A stone-cut replica of a type of diagonal braced lantern construction closely related to the Parthian example at Nisā and to that in the Great Mosque.

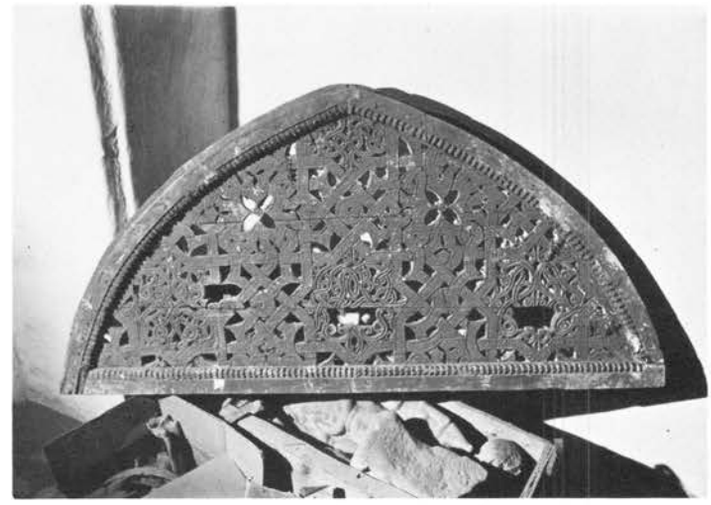


18.39 The Great Mosque. One of the high western bays of the north prayer hall ceiling, containing fragments of ancient woodwork, including two early ceiling bays.

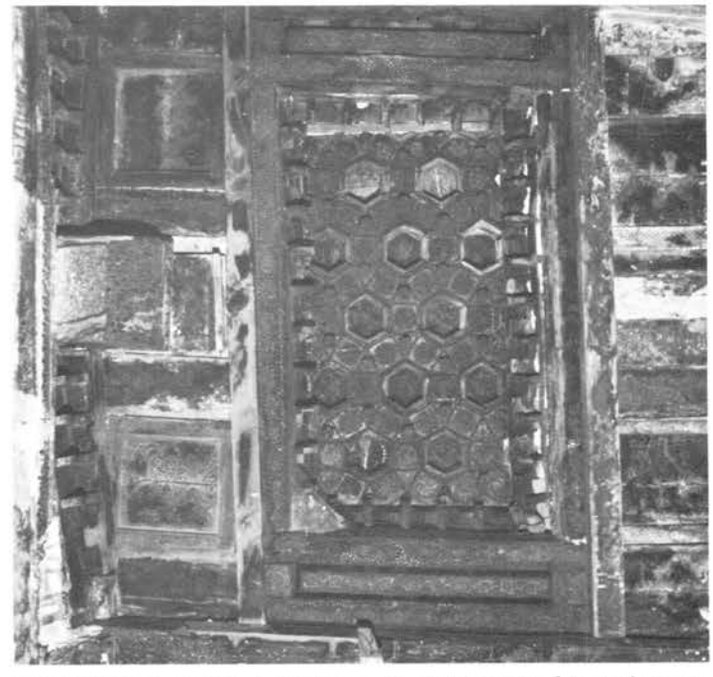


18.40 The Great Mosque. Another of the high western bays of the north prayer hall ceiling, containing fragments of ancient woodwork including two early ceiling bays.

18.41 The Great Mosque. Section of the continuous Kūfic inscription encircling the walls beneath the ceiling beams.



18.42 The Great Mosque. Wooden fanlight with plaited interlace.



18.43 The Great Mosque. Another of the high western bays of the north prayer hall ceiling. Containing bays and other fragments of an early ceiling.

niches. Thereafter the shaft of the minaret changes to a cylinder, up to a height of 23m from the courtyard paving, when a circular plastered balcony on a bracketed wood platform projects from it. Above this, the minaret changes again to a plain polygon, pierced with a small window opening in each side near the top, and capped with a small, slightly ogee-shaped dome without mouldings.

The eastern minaret is externally close to the western minaret in height and basic form, but is markedly wider. An important difference is that the eastern minaret had a blind arcade on all four sides above roof level, composed of three-pointed arches containing scalloped niches each standing on a pair of half-columns (pls.18.9,15). The balcony is entirely of masonry, corbelled out in eight rows of angled bricks from the cylinder below. Finally, the upper windows have heads which are cinqfoils instead of simple arches.[38]

Internally, the plan of the eastern minaret is a square up to the full height of the first storey. Well-built strainer arches forming pointed vaults in brick cross from the sides of the minaret to the squared central core at each landing. There are, curiously enough, two doors into the minaret at its base, one on the east and one on the north. Before the recent renovation there was a row of stucco horseshoe arches standing on double columns on the eastern side of the minaret below the ceiling of the eastern hall. They have now been removed.

The two tombs mentioned by al-Ḥajarī as being on the court-yard side of the eastern minaret have been incorporated into the rebuilding of the library staircase (done in 1355/1936-7). They were tombs of the Ḥasanī descendants of 'Alī b. Abī Ṭālib, one of them dating from 399/1008-09.

The Architectural Origins of the Great Mosque

The Great Mosque is the only Ṣan'ā' mosque known to date from before the 7th/13th century which has arcades instead of columns supporting the roof.[39] The arcades in the Great Mosque are of two types, semi-circular and pointed. The semi-circular arches are lower than the others and restricted to the south and north prayer halls, which might suggest that they date from the rebuilding completed about 265/878, the earliest likely date for any major part of the upper structure to have survived, if the historical sources quoted earlier are to be believed. On the other hand, there is evidence that the ceiling of the northern hall was originally higher and was lowered at a later date, probably in the 5th/11th century. There is, therefore, a possibility that these semi-circular arches may have been lowered at the same time.

The pointed arches certainly date from a later period, probably most of them from the rebuilding done by Arwā bint Aḥmad, the Ṣulayḥid queen in the 6th/12th century.

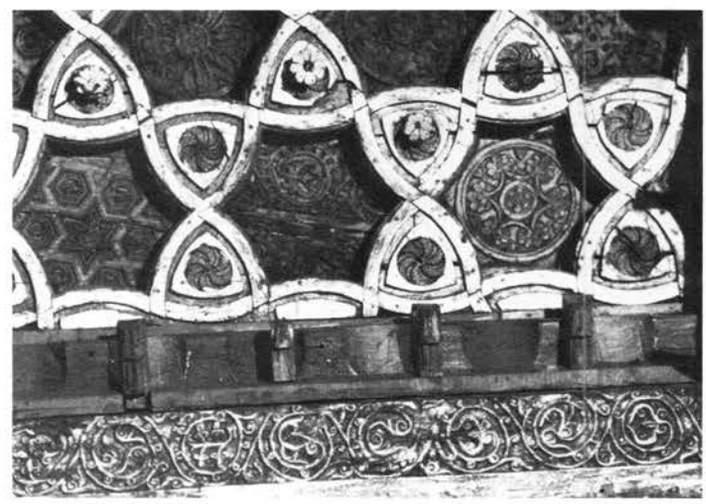
The use of semi-circular arches in the earlier parts of the mosque may reflect a desire to reproduce the appearance of the first mosque on the site, which in turn may have been influenced by the construction of the Christian church, which was, according to early historians, built with arcades.[40] The decoration on the imām's door in the *qiblah* wall is of Byzantine type and shows arches on columns.

The outer walls are unlikely to have been seriously destroyed in the flooding of the mosque. Presumably, if any parts had fallen the stones could easily have been replaced in position. The date of the oldest part of these walls is not easily determined. They were apparently the walls into which the first 'Abbāsid governor fitted doors (or constructed formal doorways in stone?) ca. 133/750. The first mosques[41] are thought not to have been surrounded by walls, but simply by a trench, a practice which is thought to have lasted about a century.[42] In the case of the Ṣan'ā' mosque, the wall probably dates back to the time of al-Walīd (ca. 88/706), at which time the mosque was enlarged to its present size and the position of the *qiblah* wall fixed. The latest likely date for the walls is 136-145/749-754, when doors were added, and the mosque was likely to have been repaired, according to the evidence referred to on p.324a.

It was an early tradition that the entrance of the imām into a mosque should be made on the *qiblah* side of the building: 'It is not fitting that the imām should pass through the people.'[43] The existence of a *qiblah* doorway in the Great Mosque of Ṣan'ā' is likely to date back to an early period if only because of the ancient door which was used.

However, there are three doorways on the *qiblah* side of the mosque, the central one being the one last used by the imām, the two others being blocked. Of the three doorways, that on the north west appears the oldest (pls.18.2,52). It is flanked on the exterior by curious emblems. A pair of pigeons or doves face each other in a bas-relief in basalt on either of the openings.[44] There are rosettes in the top corners of each block. Each bird stands on one leg and stretches one leg towards the bird opposite. Their claws do not touch, however, and it is possible that they held an emblem which has since been removed. Better evidence for dating the opening is given by the capitals of the columns flanking the doorway, which are almost completely built-in by the closing of the entrance. These have lobes very reminiscent of Samarra I type ornament. This would place them in the second quarter of the 3rd/9th century.

The projecting central doorway itself contains no such evidence of an early date, but on the contrary is apparently rather late (pl.18.54). A deep niche containing a crude stone semi-dome with scalloped fluting is framed by an ogee arch of unrefined shape. A band of polygons serves as decoration above the door;



18.44 The Great Mosque. Section of the early ceiling, edge mouldings and other fragments from a high western ceiling bay.

they have shallow holes in the centre, which may suggest that they were once the bases of polygonal columns. Alternatively, they may have once been decorated with plaques grouted into the front of the polygons. The ogee arch has pronounced roll

38 In 1055/1644-5 'a thunderbolt (*ṣā'iqah*) took a part of the eastern minaret in al-Jāmi' al-A'ẓam and split the eastern wall (*jidār*) of the Jāmi',' Jarmūzī, *al-Sīrat al-Mutawakkiliyyah*, 117.

39 Al-Walīd's mosque at Medina 89-91/707-9, like most Ṣan'ā' mosques did not have arcades, but is described by an eye-witness as having 'very tall columns . . .without arches resting on them.' Creswell, *Early Muslim Architecture*, London, 1959, I, 44.

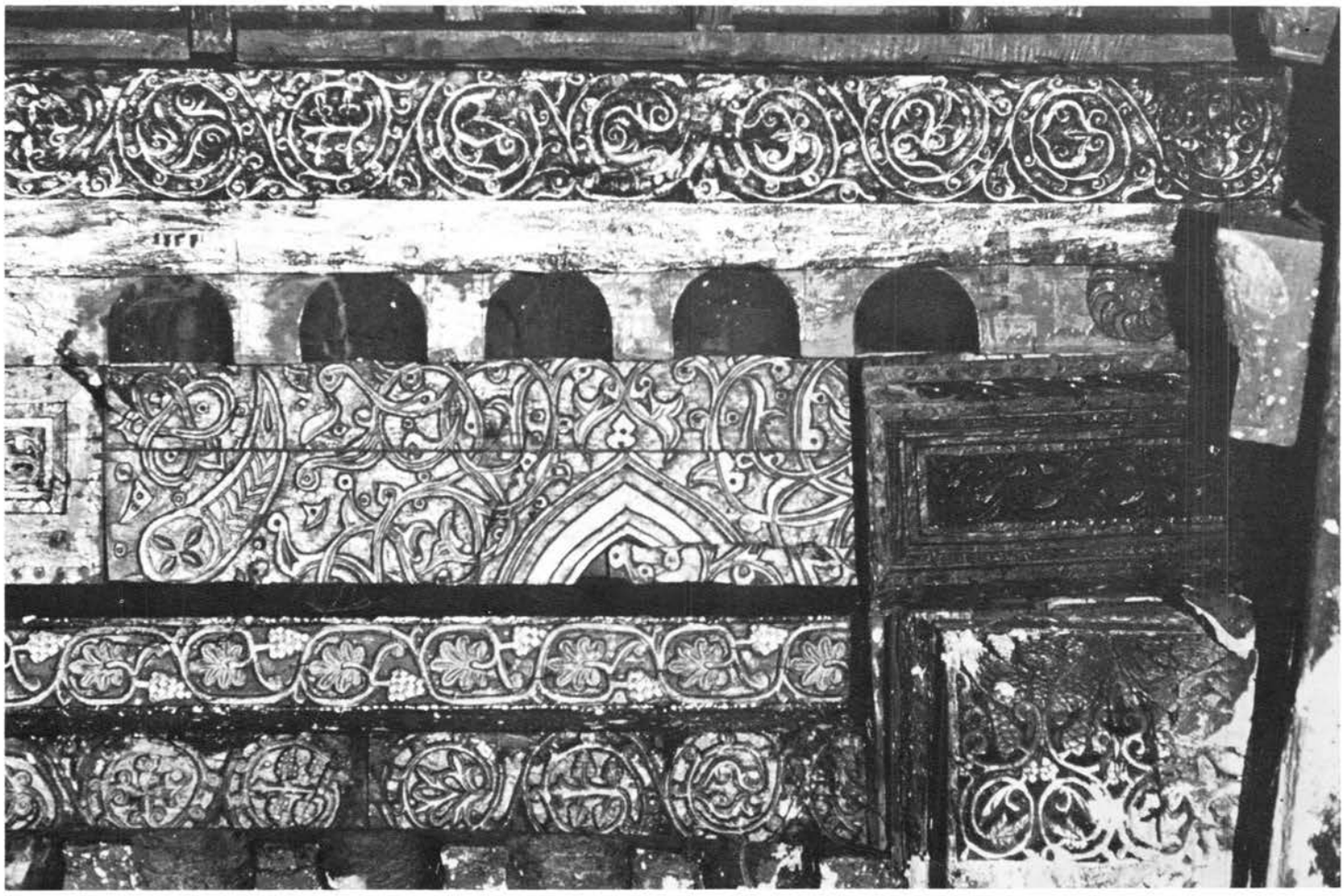
40 See p.45b.

41 e.g. Kufah, 17/638. Creswell, *EMA*, I, 16 seq.

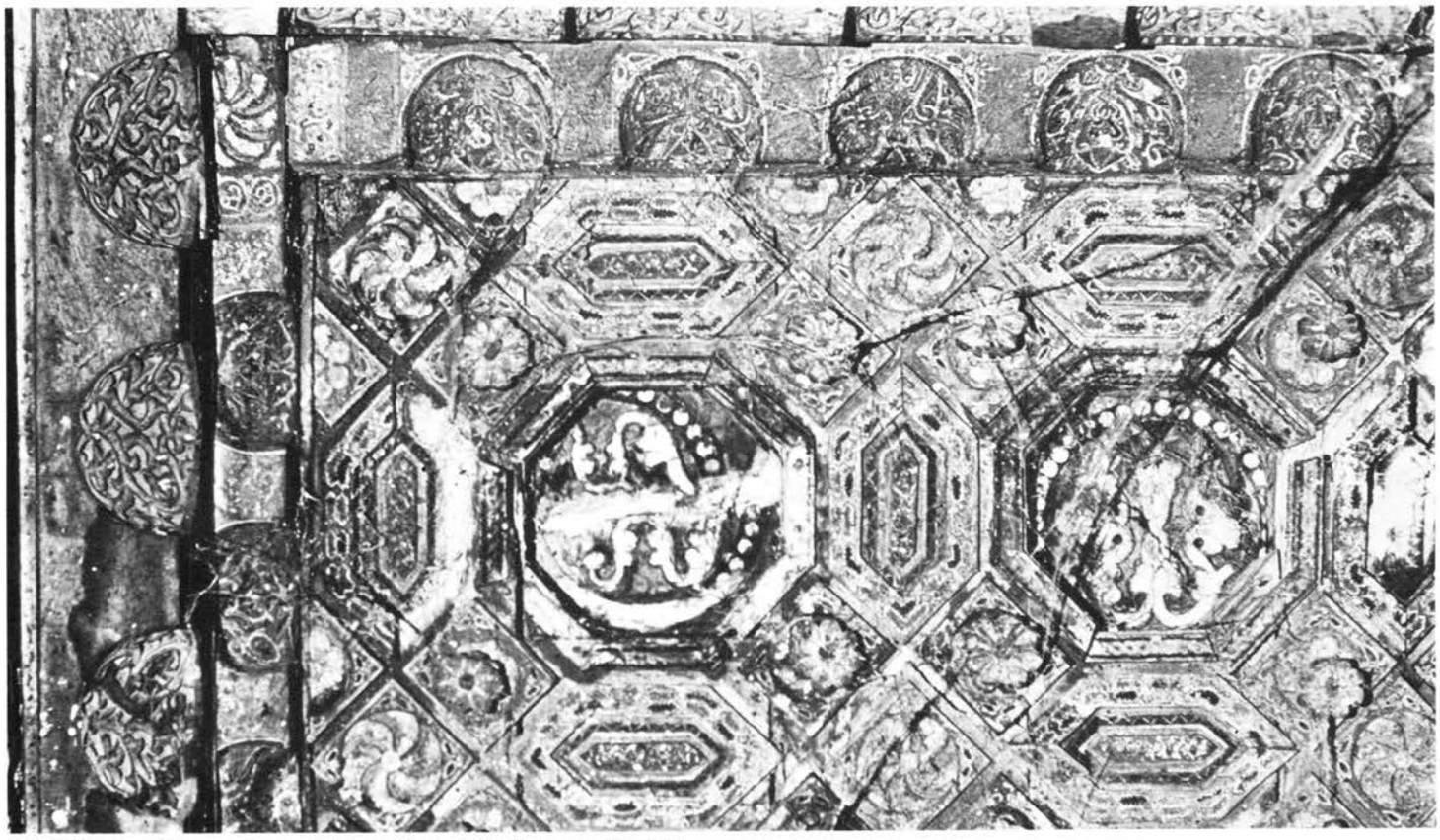
42 Al-Ṭabarī, see Creswell, op. cit.

43 Al-Balādhurī, *Futūḥ al-Buldān*, Leiden,1879-81,ed. de Goeje, 347 and 348.

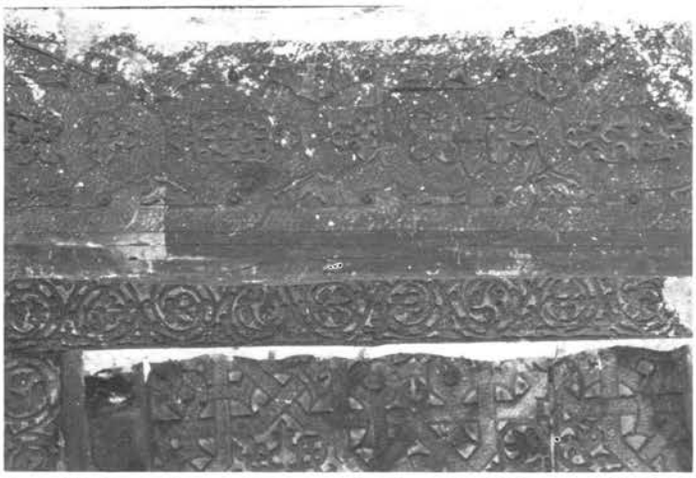
44 It has often been suggested that these birds are Christian, and are therefore evidence that these blocks of basalt, at least, come from a Christian building, possibly the cathedral. As these blocks are approximately the same size as the rest of the blocks, the stones of the mosque walls might even have been taken from the Christian cathedral, from which the mosaics used to decorate the Ka'bah in Mecca were removed in 65/684 (Mas'ūdī, *Prairies*, ed. Pavet de Courteille, Paris, 1861-77, V, 192-3). On the other hand pigeons (or doves) are a common feature on domes and minarets in Ṣan'ā', used as a symbol instead of the crescent, e.g. al-Madrasah and Ṣalāḥ al-Dīn minarets.



18.45 The Great Mosque. Fragments of early woodwork, including a carved beam end, from a high western ceiling bay.

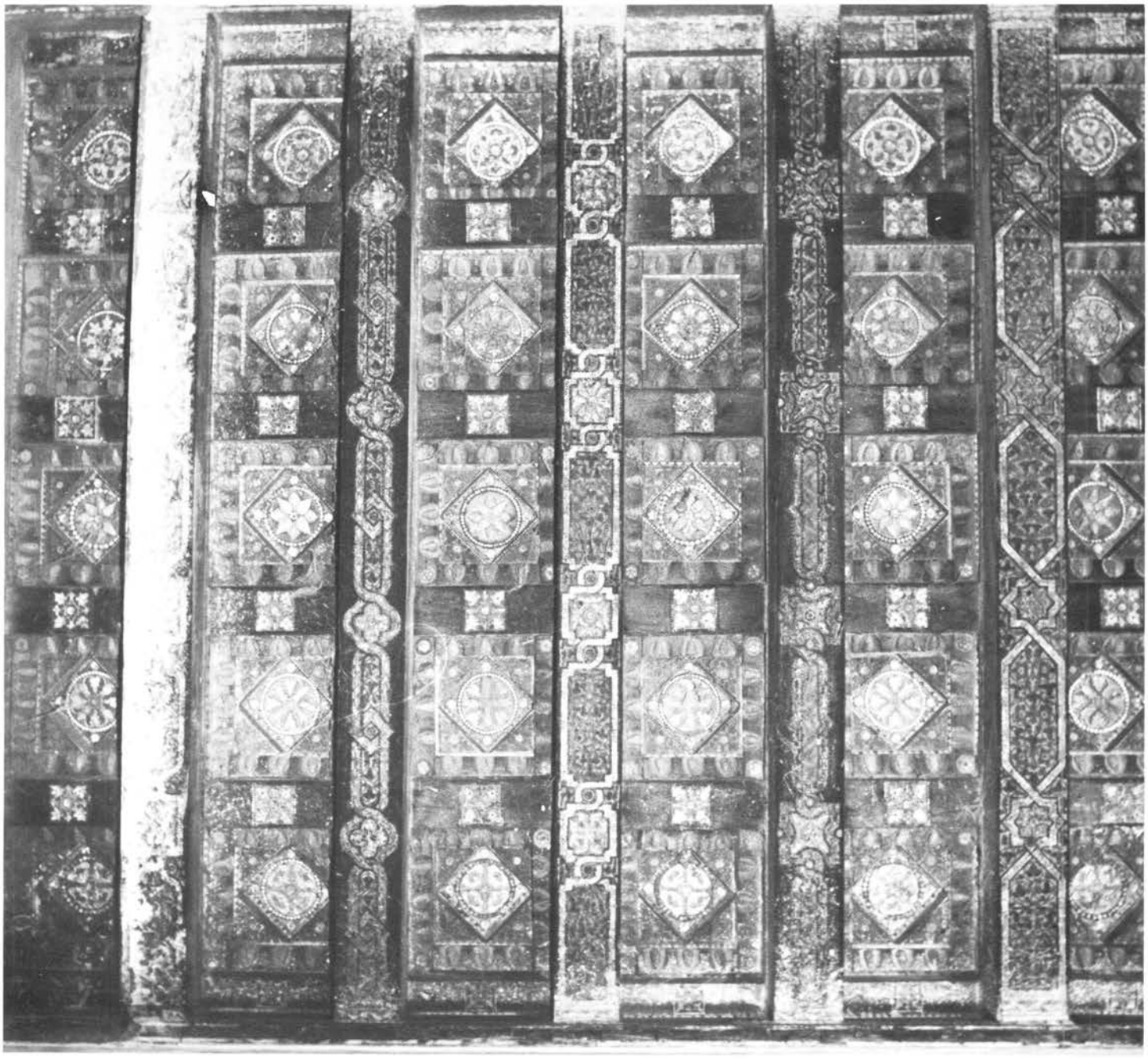


18.46 The Great Mosque. A second section of early ceiling from one of the high western bays.



18.47 The Great Mosque. Fragments of early woodwork from one of the high western bays.

18.49 The Great Mosque. Fragments of early decoration and epigraphy from one of the high western bays.



18.48 The Great Mosque. Part of the carved and painted ceiling of the eastern side of the mosque, dating from the reconstruction of the mid-6th/12th century.

moulding on its outer edge. Two blocks serve as capitals and terminate the row of polygons. On the inside they have circular shields in circular recesses, while on the face each has a bas-relief of a small arch rising from a pair of columns. The frame of the arch has a knotted ornament, which combined with the bold roll moulding on the arch suggests a date no earlier than the 5th/11th or 6th/12th centuries for most of the doorway. Within the arches are two curious emblems of birds holding the inside column with their feet, so that they are perching sideways. The symbolism is difficult to explain, but they are clearly Islamic. There is a Kūfic inscription above the doorway (pl.18.53, fig.18.2c) which is discussed below. On either side, in the main wall of the mosque, there are single large blocks containing what appear to be the remains of bas-reliefs of bulls.

The third doorway, that on the north east, looks as though it was merely a simplified copy of the north western door, meant to balance the facade after alterations at some date later than that of the north western door (pl.18.3). On the other hand, this doorway is not false, for it does penetrate right through the wall thickness, and the reveal is now used on the inside as a cupboard, as is the reveal of the north western door.

The arch over this doorway is an ogee, which the north western of the three arches is not. It springs from the two bas-reliefs each showing a pointed arch with a double frame rising from a pair of columns. The relief is deeper than that on the bas-reliefs of the central doorway, and the work does not appear to date from the same period. The arches on these little blocks are not ogee like the main arch, so that these stones may have been moved from another position.

The rebuilding of the eastern side[45] can be clearly seen in the structure. Not only is there an increased height in the eastern hall reflected in the outside wall, which was rebuilt with smaller stones (16 courses in the height of 13 of the older wall), but there is a straight joint on the southern wall between the constructions of different dates. The five doorways of the eastern side are large and fine in construction externally. Their slight horseshoe shape resembles doorway heads of the 3rd/9th century in Egypt and elsewhere.[46] The inner stonework, into which the wooden doors are actually fitted, does not seem to be original, but a reconstruction of a later date, probably the Ottoman period.

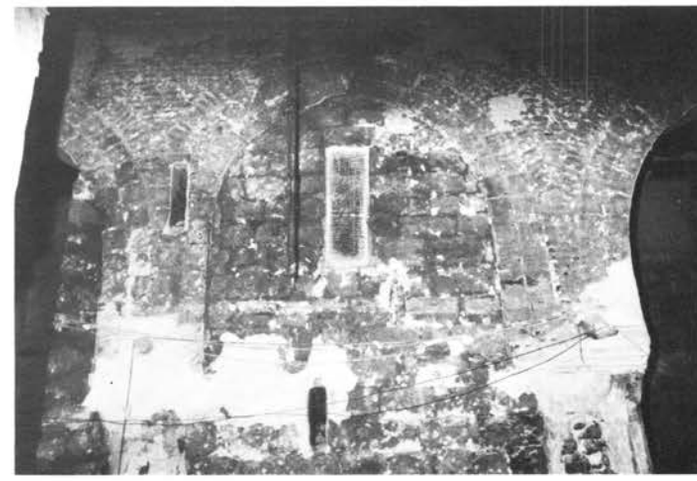
The inner reveals of the door heads of the Bakīriyyah and Ḥammām al-Maydān (1005/1597) are exactly the same. These doors have between them, high up on the outside of the wall, carved tufa panels with raised Kūfic inscriptions, the writing on all of which was subsequently chipped off, except for the *basmalah* (i.e., *bismillāh al-Raḥmān al-Raḥīm*) and another pious phrase (see pl.18.55). The ceiling of the eastern wing is the finest complete ceiling in carving and richness in the whole mosque (pl.18.48), and almost certainly dates from Arwā's rebuilding of 525/1130-1.

The date of the rebuilding of the western wing is uncertain, but it is not unlike the eastern wing in height and construction. Although it is not executed with such skilled workmanship, it seems probable that this rebuilding dates from the same period, a conclusion supported by the painted decoration on the ceiling, which has exactly the same patterns as the carved decoration in the eastern wing.

The central axis of the mosque running from south to north was apparently moved to the east to accord with the extra space provided by the re-erection of the eastern wing. The southern door, the *miḥrāb* and the *qubbah* in the courtyard were all now west of the centre. Some attempt was made to correct this by moving the *miḥrābs* in the southern and northern halls towards the east. The original position of the northern *miḥrāb,* to judge

45 By Arwā in 525/1130-1, or possibly the smaller stones of the eastern wall and the straight joint referred to below date from an earlier rebuilding.

46 Cf. the mosque of Ibn Ṭūlūn, Cairo, mid 3rd/9th century.



18.50 The Great Mosque. Lower level of the eastern wall of the western minaret, with the plaster removed during the redecoration of 1974. Note the original inscription in the centre.

18.51 The Great Mosque. Inscription on the eastern side of the eastern minaret, above roof level.

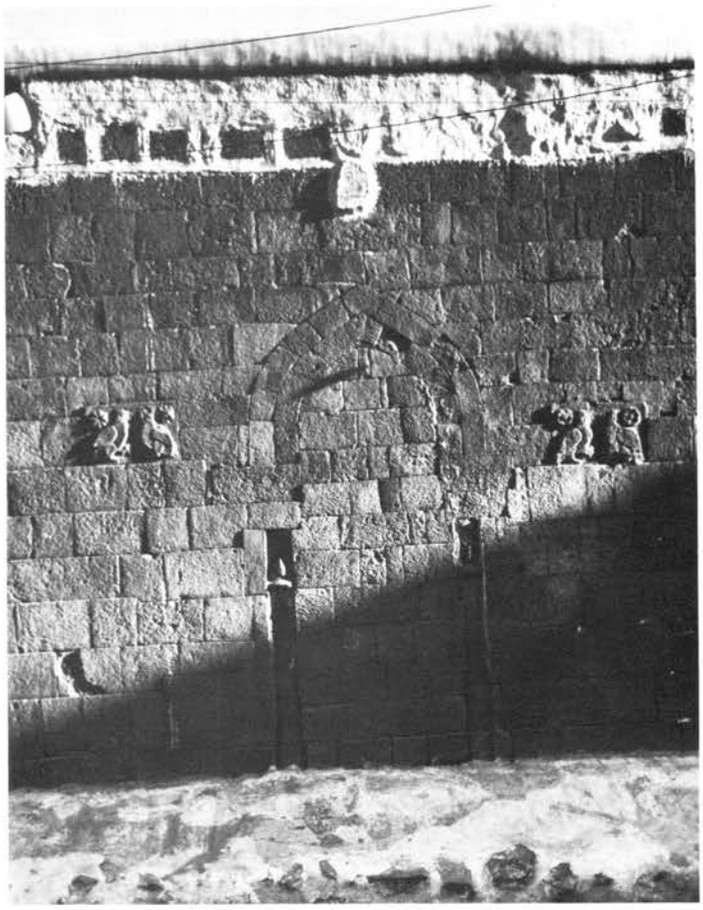
by the domes in front of it, was now more than 5m off-centre, so that the new eastern wing apparently extended the mosque by more than 10m towards the east.

The eastern hall is 11.70m wide. If we were to assume that the original outside wall ran along the present edge of the courtyard, so that the eastern minaret touched the outside wall, as the western minaret still does,[47] then the centre line of the *miḥrāb* dome would lie almost exactly on the centre line of the mosque.

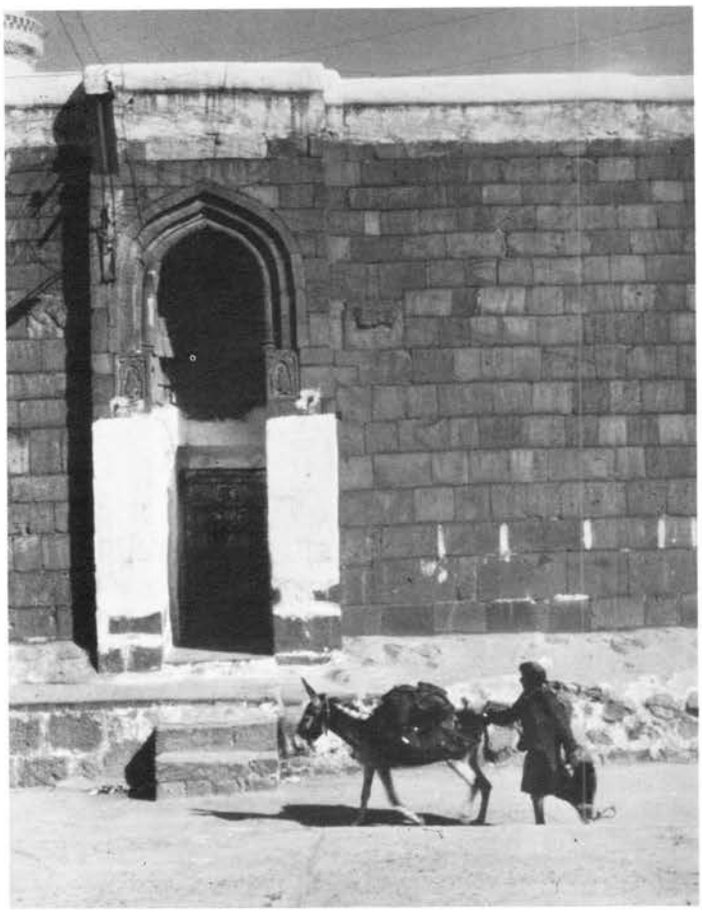
All this evidence seems to confirm that the eastern wall was moved, and that the whole eastern hall is an addition of extra space to the original mosque. The intercolumnations of the last two bays in the northern and southern halls are highly irregular, as would be the case if they had to accommodate the removal of an outside wall 1.35m wide and its replacement by piers averaging 0.75m.

It now seems reasonable to visualize the earlier mosque as 54m wide instead of 66.

47 The eastern and western minarets of al-Janad near Ta'izz both touch the outside walls, this being a mosque founded at the same time as the earliest Great Mosque in Ṣan'ā', that is, during the lifetime of Muḥammad. Both were probably rebuilt by al-Walīd.

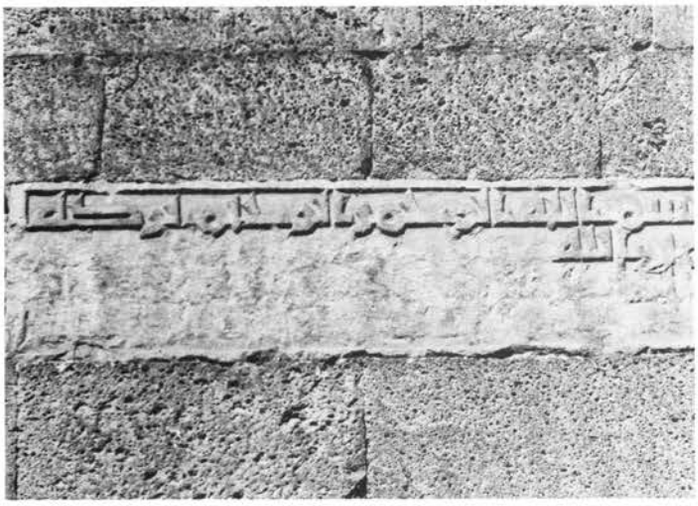


18.52 The Great Mosque. The most westerly of the three doorways in the northern *qiblah* wall seen from outside. Now blocked.



18.54 The Great Mosque. The central doorway in the northern *qiblah* wall seen from outside.

18.53 The Great Mosque. External inscription above the central doorway in the northern *qiblah* wall. (Photo: R. Wilson)



18.55 The Great Mosque. One of the partially defaced inscriptions high up on the outside walls on the eastern side. (Photo: G.R. Smith)

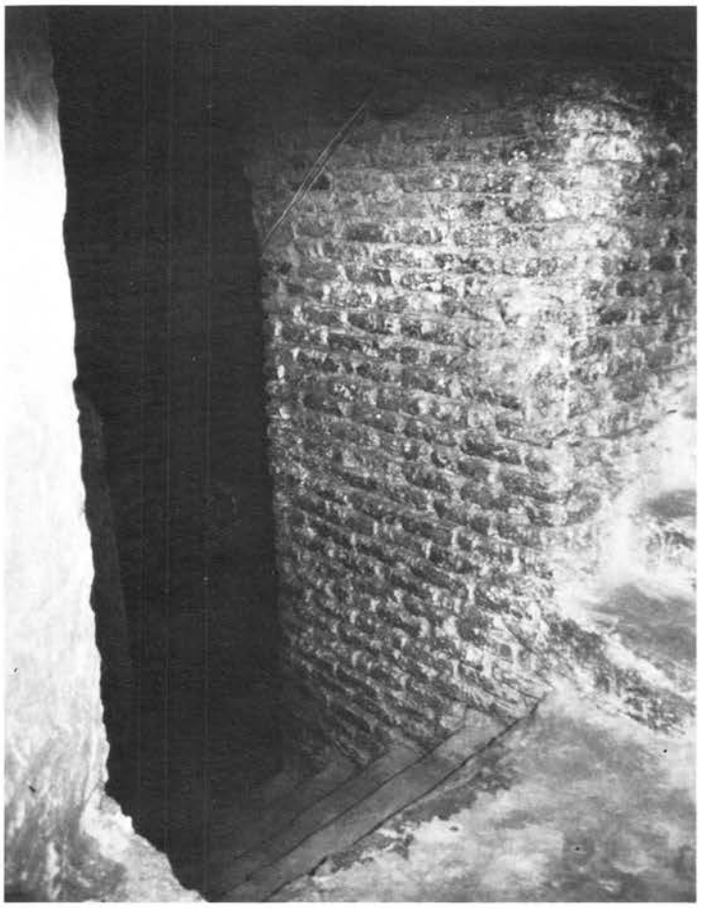
Mosques of the first century after Muḥammad were usually perfect squares in plan.[48] The historians mention that the *qiblah* wall of the Ṣan'ā' mosque was moved forward to the position it is in today. Therefore its first position seems likely to have been roughly 54m north of the present southern wall, or 24m south of the present *qiblah* wall, i.e. within the present courtyard.

The turning of the *qiblah* wall slightly towards the north west during the subsequent rebuilding of approximately 266/879 is evident in the plan. It led to an increase in the intercolumnations at the eastern end of the northern wall to accommodate it.

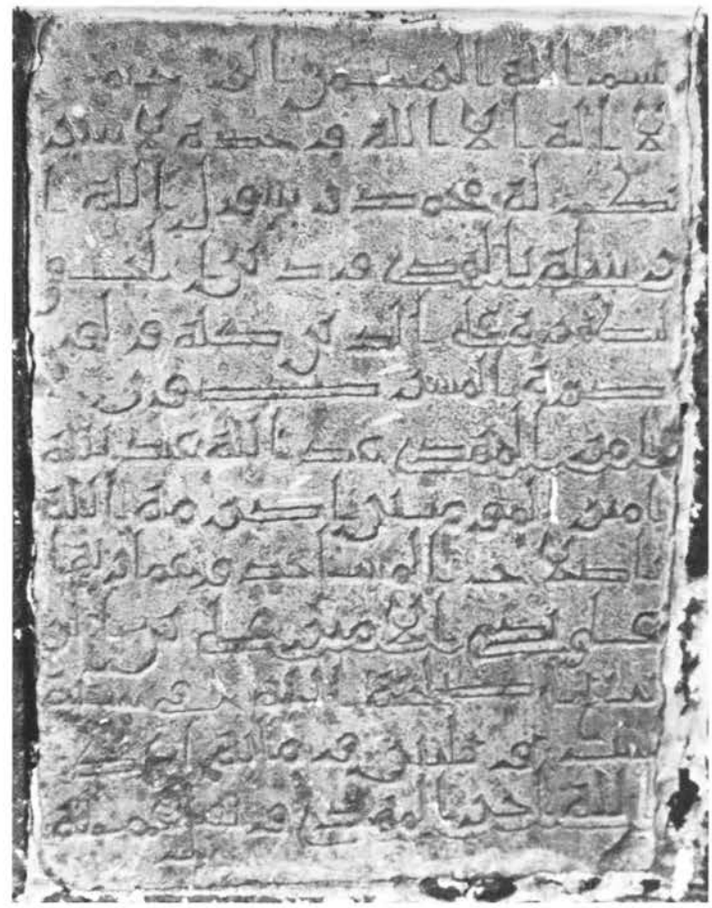
One or two hundred years after this Yu'firid rebuilding, the beautiful ceiling of the northern hall was taken down and replaced by the present beamed ceiling, the height of the walls possibly being reduced at the same time. The most likely date mentioned in the histories when this might have been done is the four year period 389-93/999-1002 when the Amīr al-Ḥusayn b. Salāmah is said to have repaired the Great Mosque.[49] It is unlikely that it is work done for Arwā bint Aḥmad in the 6th/12th century, for the craftsmanship is far inferior in conception and execution to the alterations undertaken under her patronage—if we accept the

48 Cf. al-Ṭabarī quoted in Creswell, *EMA*, I, 25f. Both the Basrah and the Kufah mosques (45 and 50/665 and 670) had five aisles on the *qiblah* side and two on each of the other sides, with flat wooden roofs. The mosque at Wāsiṭ was also square (82/701)(ibid, 40-42). Cf. J. Sauvaget, *La Mosquée omeyyade de Médine*, Paris, 1947.

49 *Masājid*, 27.



18.56 The Great Mosque. Interior of the eastern minaret at the lower level.



18.57 The Great Mosque. Kūfic inscription in the courtyard. Now built into a wall adjoining the north wall of the eastern minaret.

eastern ceiling as hers—and is also generally earlier in style. There is decoration on these beams which is mainly limited to inscriptions containing passages from the Qur'ān and to small areas of ornamentation.

This beam decoration seems to date from several periods; most of it is early, some of it, however, is demonstrably from the date of the Arwā redecoration, because patterns and calligraphic styles closely related to those in the eastern hall may be observed,[50] while a few beams have decorations in much later styles.

The *miḥrāb* of the northern hall was completely constructed in the present century. Two bays to the east is the upper part of an earlier *miḥrāb* decoration. This latter *miḥrāb* appears to have been that of the widened mosque, and was possibly that redecoration in 665/1266-67 according to the inscription mentioned by al-Ḥajarī which has now disappeared.[51]

Two of the *miḥrābs* in the southern hall have decoration which seems to be relatively late. That in the approximate centre of the hall, destroyed by Imām Yaḥyā so that only the top part remains, perhaps dates from the Ottoman work of 1012-16/1603-08. The *miḥrāb* in the western arm seems to have been built in its present form a century or so afterwards.

The Central Courtyard

According to al-Ḥajarī[52] the middle court was 'built' by the Ottoman governor Sinān Pāshā in 1012-6/1603-7 'and he paved it with the stone which is there now'. The same governor also built the dome (*qubbah*) situated in the middle of the court, although whether it replaced an earlier structure on the same site is not clear.[53] The low walls between the columns which flank the courtyard were, according to al-Ḥajarī, built by Aḥmad 'Aṭā in 1326/1908-9. The columns themselves, the square single stones with plain or simplified plant-leaf capitals referred to earlier, may have been part of the work of 'building' the courtyard and contemporary with the *qubbah*, or they may be more recent still. In either case the earlier columns exposed to the weather must have deteriorated so much that they had to be replaced, for the ceilings are on every side earlier than the 11th/17th century, except the part of the southern ceiling replaced by Imām Yaḥyā. That the square columns are unlikely to date from the period of rebuilding of the eastern side, either originally or by Arwā bint Aḥmad in 525/1130-31, is suggested both by their totally different stylistic character from anything medieval known in the Yemen, and by the crude, conventionalized nature of the decorated capitals. The latter fact indeed favours a late attribution for this work, but no later than 1326/1908-9, as no further rebuilding is recorded, other than that within living memory.

The Minarets

The date of the original foundation of the minarets is not known. The western minaret, situated against the western wall on the inside, but a separate structure in brick down to the ground, incorporated two columns of an arcade on its eastern side, as well as the supposed tomb of the Prophet Ḥanẓalah mentioned on p.327b. It is therefore clearly a late addition to the

50 Arwā's redecoration of part of this ceiling is confirmed by *al-Badr al-muzīl*, 13.
51 *Masājid*, 28. See discussion p.348a.
52 *Masājid*, 29.
53 The references to a large tomb of a prophet on the site of the first *miḥrāb* raises the question whether, when the *qiblah* wall was moved forward to its present position, there was not a tomb rebuilt on the site of the original one, which later was demoted, for reasons unkown, to the present *qubbah*.

mosque, but not as late as the inscription built into its eastern side, 603/1206-7. This inscription includes the sentence 'the western minaret was restored from its foundation to the top part of it by order of the Amīr 'Alam al-Dīn . . . Wurdashār' and is discussed below under 'Inscriptions'. The wording of the sentence is not such as would have been used if the minaret were a new construction. (Similarly, the wording presupposes the existence of an eastern minaret at that time).[54] The eastern minaret was repaired by the same Amīr Wurdashār in the early years of the 7th/13th century.[55] Both minarets must have been in a considerable state of decay to have warranted this work, which suggests they had reached an age of at least several hundred years. A minaret was built in the Great Mosque before 299/911-2, if we accept the evidence of a key event in al-Janadī's description of the capture of Ṣan'ā' by the 'Qarmaṭian', actually an Ismā'īlī, 'Alī b. Faḍl.[56]

It could possibly have been added as early as the original building of al-Walīd's mosque.[57] It seems clear that the eastern minaret was built first and the western one was a copy of it, reduced in size to fit into a bay in the existing southern prayer hall.

The Archaeological Study of the Great Mosque

No archaeological study has so far been possible on the building. During the recent extensive restoration, during which almost all the plaster was removed, it was possible to see some of the joints in the construction and observe the manner of building piers and arches. Three trenches were dug, two along the western wall, and one in the north western corner in the second bay of the northern arcade, which yielded some information about successive floor levels. The lowest observed level was about 95cms below the present floor, and made of packed gravel. Several intermediate floor levels of plaster were observed.[58] It is to be hoped that systematic researches will be permitted at some future date.

The pre-Islamic Relics in the Great Mosque

In the building of the Great Mosque of Ṣan'ā' a great number of fragments were re-used from pre-Islamic buildings, as described above. These pieces are mainly capitals and fragments or drums of columns. In shape and decoration they display a certain variety of types, but can be grouped in two main categories: Sabaean and Ḥimyarite.

To the first belong stepped capitals, square or circular in section, decorated with horizontal louvres, and columns with eight or sixteen sides.

To the group of the Ḥimyarite antiquities belong capitals decorated with acanthus leaves, displaying different degrees of formalization, and columns covered with intricate plant-motifs.

It is to be noted that while capitals and columns of the Sabaean group are monolith, in the Ḥimyarite group the two architectural elements are always separated. It is also worth notice that the Sabaean pieces are all made of the same kind of limestone, whereas the Ḥimyarite show different kinds of stone.[59]

Early Islamic Relics in the Great Mosque

Several fragments of wood decoration in the four raised bays at the south western edge of the northern hall appear to date from the 1st/7th century. In the second bay from the south there is an edge moulding decorated with a running vine motif which spirals one and a half times, and contains grapes, vine-leaves and tendrils (pl.18.47). This is close in style to decorations on the bronze soffit of the south doorway of the Dome of the Rock, Jerusalem, 72/691.[60] In bay 3 there are several brackets decorated with motifs in the same style (pl.18.45).[61] These all presumably date from the rebuilding of the Great Mosque ca. 87/705 under al-Walīd.

The intertwining strap ornament on the underneath of the beam over the south door incorporates very conventionalized vine leaves; it is even possible that they may be meant to be interlocked cherubim wings (pl.18.18). There are rosettes in the interstices between the straps. This decoration clearly relates to decoration of the century immediately preceding Islam, an attribution which seems confirmed by the presence of a Latin cross (left hand side). Apparently this is a re-used jamb from a Christian church.

Almost all of the remaining woodwork in ceiling panels 1 to 4 dates from the rebuilding of about 265/879. Several small rich pieces probably belong to the following century and may come from early tombs (pls. 18.43-47).

The domes in front of the *miḥrāb* have already been discussed. Their age is difficult to establish. An objection might be made to a very early date for them on the grounds that the ceiling in which they are placed is low. But it should be noticed that the four high bays against the western wall do not include the aisle against the *qiblah*. So that, even if the theory of an original higher ceiling is accepted, this would not preclude the *qiblah* aisle, and therefore the domes, from being as early as 265/879. The objection to this date would be better founded on the absence of rich decoration similar to that on the beams and panels of the four higher western bays. Following this clue, the domes are either earlier, re-used from another position or even another building, or later, dating possibly from the rebuilding of the northern hall ceiling, which we have tentatively placed at 389-93/999-1002 (p. 344b). This seems to conform better with the little decoration which may be observed on the beams. Perhaps the whole dome construction is an exact copy of a ruined construction of three centuries earlier ca. 87/705, with only the beam decoration changed. Some of the decoration on the dome beams dates from Arwā's redecoration of the 6th/12th century. Even so, they are remarkable examples of early 'dome' construction in front of a *miḥrāb,* incorporating in at least three brackets some even older construction.

Above the outside of the northern door on the western side is a curious projecting bracket in basalt (pl.18.56). It represents an animal's head, possibly a bull. It appears to have no function in its present position, although it has been duplicated in a later crude copy on the other side of the doorhead as though serving as the support for a canopy over the door. A similar pair of projecting stone brackets occurs above a very old door, now blocked up, in Bayt Muṭahhar in the Ṭalḥah quarter (see p.494a). The early example on the Great Mosque may be a re-used bracket from an interior reveal, like those above the eastern doors, in which case it might date from Arwā's reconstruction (525/1130-31). But as there is nothing else like it in the work done at that time, this seems highly unlikely, and it should probably be grouped with the defaced bas-reliefs of animals around the central door on the northern side, as an early part of the mosque that may have been re-used from another building.

In the National Museum in Ṣan'ā' is preserved a number of wooden fragments from early ceilings, one from the late 1st/7th or 2nd/8th centuries, and a strip of the early Kūfic from under the beams of the northern hall.[62]

54 Al-Janadī, in his biography of the Qāḍī al-Sariyy b. Ibrāhim al-'Arashānī, says that Wurdashār built the two minarets—the two minarets not existing before that. But this seems to be contradicted by the inscription. Cf. *Masājid,* 28.

55 *Masājid,* 28.

56 Al-Janadī (died ca. 732/1331), *Kitāb al-Sulūk* of Baha 'l-Dī al-Janadī, trans. Kay, 200.

57 Square minarets were built onto the Mosque of 'Amr in Cairo in 54/673. They were called *ṣawma'ah*, sing., the name still usual for a minaret in Ṣan'ā', and north Yemen in general.

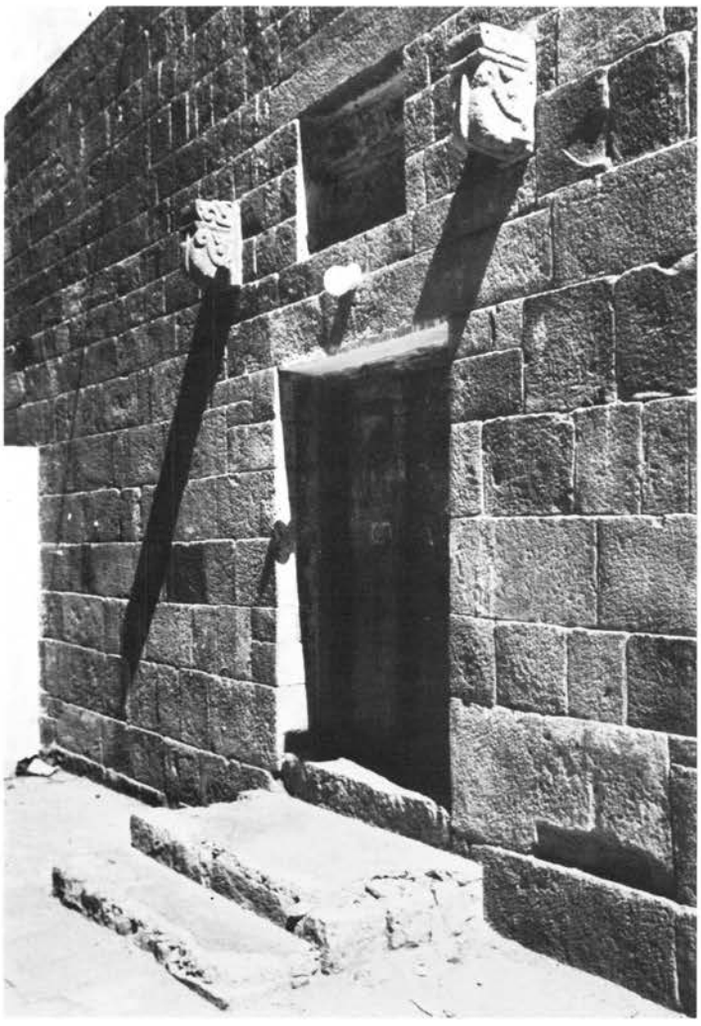
58 P. Costa, op. cit., 496.

59 The pre-Islamic antiquities in the Great Mosque of Ṣan'ā' are described in detail by P. Costa, op. cit., 496.

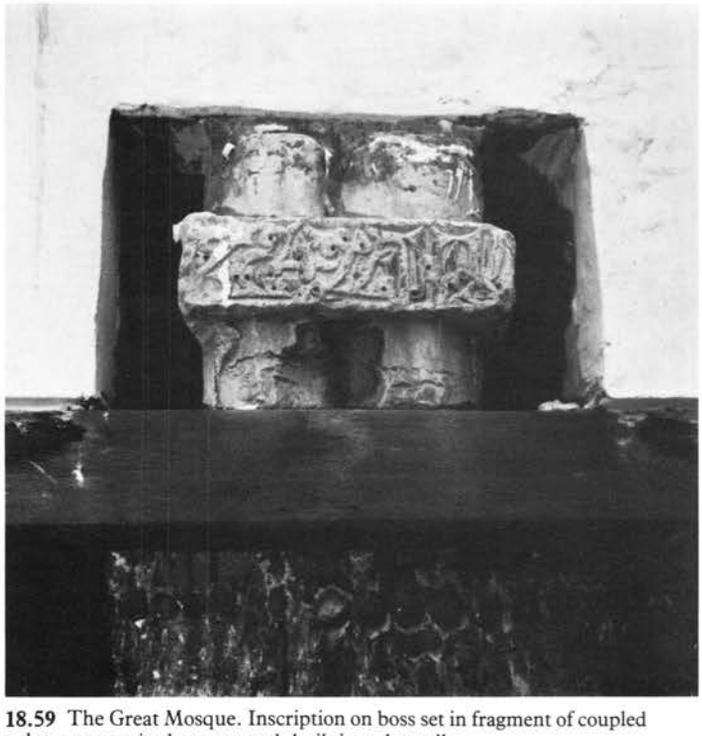
60 Creswell, plate 4.

61 Creswell, fig. 4.

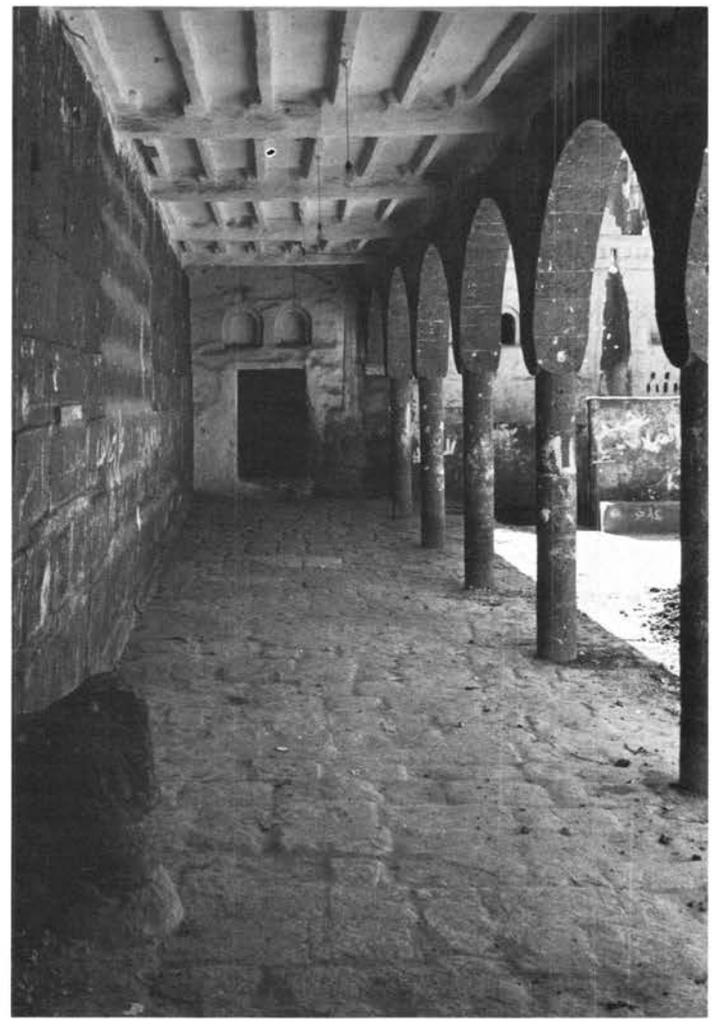
62 Although not early Islamic, there was in the National Museum an important relic in the form of a cupboard removed from the Great Mosque which carries an inscription recording that it is a gift of Sulaymān the Magnificent.



18.58 The Great Mosque. Western doorway to the northern prayer hall. Seen from outside with flanking consoles on either side above it.



18.59 The Great Mosque. Inscription on boss set in fragment of coupled columns, now in the courtyard, built into the wall.



18.60 The Great Mosque. Ablution Court, showing on the left the stone along the western wall marking the position of al-Hajar al-Mulamlamah, now reputedly more than a metre underground.

Some of the Inscriptions of the Great Mosque

Most important in Ṣan'ā' from both the historical and palaeographical points of view are the inscriptions of the Great Jāmi' Mosque.

When the Umayyad Caliph al-Walīd b. 'Abd al-Malik (705-15) appointed Ayyūb b. Yaḥyā al-Thaqafī as governor in Ṣan'ā', the latter received a letter with instructions to enlarge the Great Mosque. Ayyūb enlarged the mosque by extending it on the north side—'he extended it from its first *qiblah* to where its *qiblah* is now.' The new northern wall contained inscriptions and decorations which were removed in the 4th/10th century by the Qāḍī of Ṣan'ā' who insisted that they would distract the believers as they prayed.[63]

Doors were provided for the first time in the early 'Abbāsid era and the Kūfic inscription in courtyard (no. 1 *infra*) tells us that the governor, 'Alī b. al-Rabī', was instructed in 136/753-754 to have repairs carried out to the mosques of Ṣan'ā'. We can safely assume that the Great Mosque would be included in those mosques to have been repaired.

We are told by an 11th/17th century Zaydī historian that the Ṣulayḥid queen, Arwā bint Aḥmad, built the eastern side (*al-jānib al-sharqī*). Certainly the structure of the Great Mosque has been extended on the eastern side, but this statement should nevertheless be regarded with caution as stated above. Since there is no record of such a rebuilding in the earlier historians who deal with the Ṣulayḥids and since the inscriptions in the eastern wall are of undoubted antiquity (nos. 4-10 below) and must pre-date the Ṣulayḥids, it is suggested that any rebuilding of the eastern

63 *Masājid*, 24.

wall during Ṣulayḥid times was of a minor nature. If we take a brief look at the inscriptions of the ceiling, however, in the northern prayer-hall, these can be ascribed stylistically to the Ṣulayḥids and are clearly 6th/12th century work. This theory is strengthened by the phrase, *tafarraq a'dā' Allāh,* 'may God's enemies be scattered' or perhaps even 'God's enemies have been scattered', a not uncommon Ismā'īlī/Fāṭimī slogan[64] used on coins and originally referring to the Fāṭimid capture of the Aghlabid residence of Raqqādah in al-Qayrawān, North Africa. All this would seem to point to considerable Ṣulayḥid repair work on the ceiling ruined by 'Alī b. al-Faḍl, the so-called Qarmaṭian leader, but in fact the official Fāṭimid *dā'ī,* after his conquest of Ṣan'ā' a century before.

Two inscriptions (nos. 2 and 3 below) are preserved in the walls of the minarets, both indicating that they were rebuilt by the Ayyūbid amīr, Wurdashār b. Sāmī. We know too from written sources that the ablution rooms (*maṭāhīr*) were re-built during this period by the Qāḍī of Ṣan'ā'.[65]

The evidence for the renovation of the *miḥrāb* in 665/1266 seems to have been covered over now by plaster, for it rests simply on the report of a scholar writing in the 1930s that an inscription on the *miḥrāb* gives this date for the renovation. This inscription can no longer be found.

Inscription no. 1
13 lines, simple Kūfic.
Situated on the north wall in the chamber of tombs called al-'Awsajah in the courtyard next to the east minaret.
Cf. al-Ḥajarī, *Masājid*, 26.
See pl. 18.57
Arabic text

1	بسم الله الرحمن الرحيم
2	لا اله الا الله وحده لا شر
3	يك له محمد رسول الله ا
4	رسله بالهدى ودين الحق و
5	ليظهره على الدين كله ولو
6	كره المشركون
7	امر المهدي عبد الله عبد الله
8	امير المؤمنين اكرمه الله
9	باصلاح المساجد وعمارتها
10	على يدي الامير علي بن الر
11	بيع اصلحه الله في سنة
12	ست وثلثين ومائة اعد
13	الله اجر المهدي وقبل عمله

Translation
1 In the name of God, the Compassionate, the Merciful.
2 There is no god but God alone; no part-
3 ner does he have. Muḥammad is the Apostle of God. He
4 sent him with the Guidance and the Faith of Truth and
5 to make it triumph over every (other) religion, even though
6 the polytheists are averse.
7 Al-Mahdī, the servant of God, ordered
8 —Commander of the Faithful, may God make him noble—
9 the mosques and their constructions to be repaired
10 at the hands of Amīr 'Alī b. al-Ra
11 bī', may God make him righteous, the year
12 one hundred and thirty-six. May God make ready
13 the reward of al-Mahdī and accept his deed.

Commentary
lines 3-6. Qur'ān, IX, 33.
line 7. There is a scribal error here, with no loop for the *bā'* of *'abd.* The scribe has, therefore, followed the normal practice of repeating the phrase correctly.
line 8. The 'Abbāsid Caliph we know by the name al-Mahdī was not the Caliph in 136/753-54 when this inscription was supposedly made. He became Caliph in 158/775, succeeding al-Manṣūr who must have been Caliph when the stone was inscribed.
line 10. 'Alī b. al-Rabī', i.e., 'Alī b. al-Rabī' b. 'Abd Allāh b. 'Abd al-Maddān al-Ḥārithī, cf. above, chap. 7, *History of Ṣan'ā'*, Appendix to 1, *List of governors* etc.
lines 12-13. 136 is equivalent to 753-54. Cf. Qur'ān, XXXIII, 29.

Inscription no. 2
7 and 2 lines, *naskhī,* no dots.
Situated in the eastern wall of the east minaret.
See pl. 18.51
Arabic text

1	... عمارة هـ[ـذه]
2	[المـ[ـنارة الامير الاجـ[ـل]
3	[الـ[ـكبير الأعز المختار ملـ[ـك]
4	[الا]كراد مصطفى امـ[...]
5	[...]ومير (؟) علم الدين ور[د]
6	[شـ[ـار بن سامي الشاكانـ[ـي]
7	[انفـ[ـق عليها من ماله لو[...]
8	...
9	...

Translation
1 ... the building of th[is]
2 [min]aret Amīr, he of the highest rank,
3 the great, the mightiest, the chosen one, king
4 of the Kurds, Muṣṭafā, Am (?)
5 īr (?) 'Alam al-Dīn Wur[d]
6 -ashār b. Sāmī al-Shākānī.
7 He spent from his own wealth on it for ...
8 year six hundred and three
9

Commentary
lines 2-4. These are indeed strange and extravagant epithets used for the governor of Ṣan'ā' under the Ayyūbids. Cf. above chap. 7, *History of Ṣan'ā', The period of the Ayyūbids.* They are used again in Inscription no. 3, line 6. There are clearly only two indentations here in the first letter of Wurdashār's father's name, giving rise to al-Ḥajarī's invention, *Masājid*, 27, Banāmī! This is a scribal error and it is evident from the histories that his father's name was Sāmī; cf. Smith, *Ayyūbids,* I, passim and personal name index.
line 8. 603/1206-07.

Inscription no. 3
21 lines, rough *naskhī,* no dots.
Situated in the eastern wall at the base of the west minaret.

Arabic text

1	...
2	[الـ[ـمسجد الجامع بصنعا امر ببنا[ئه]
3	رسول الله صلى الله عليه
4	قبل مسجد الجند وأعيدت عما
5	رة هذه المنارة الغربية من
6	اساسها الى علوها بأمر
7	[ا]لأمير الكبير الأعز المختار ملك
8	الأكراد مصطفى ...
9	علم الدين وردشار بن سامي
10	الشاكاني انفق عليها من
11	ماله في سنة ثلاث وستمائة
12	بعد ان كملت عمارة الجبانة
13	مصلى العيدين في مقدم صنعا
14	ومصلى العيدين وضع على عهد
15	النبي صلى الله عليه وأعيدت
16	عمارته من اساسها الى علوها
17	واحتفرت البئر التي فيه وعمرت
18	هي وضيعتها عمارة اخرى
19	بأمر الأمير علم الدين ورد

64 Qāḍī Nu'mān, *Iftitāḥ al-da'wah,* ed. Farḥat al-Dashrāwī, Tunis, 1975.
65 *Masājid,* 28.

20 شار انفق عليه من ماله ووقف
21 الضيعة والبئر على مصالح الجبانة

Translation

1 .....
2 [the] Great Mosque in Ṣan'ā', ordered its building
3 the Apostle of God—may God bless him—
4 before the mosque of al-Janad. The rebuilding was carried out
5 of this western minaret from
6 its foundation to its very top at the command of
7 the great Amīr .....
8 .....
9 'Alam al-Dīn Wurdashār b. Sāmī
10 al-Shākānī. He spent on it from
11 his own wealth in the year six hundred and three
12 after the building of the Jabbānah had been completed,
13 the Place of Prayer of the Two 'Īds in front of Ṣan'ā'.
14 The Place of Prayer of the Two 'Īds was positioned in the lifetime of
15 the Prophet—God bless him—and its rebuilding was carried out
16 from its foundation to its very top.
17 The well in it was dug and was constructed,
18 it and its estate as another construction
19 at the command of Amīr 'Alam al-Dīn Wurda-
20 shār. He spent on it from his own wealth and made a *waqf* of
21 the estate and the well for the benefits of the Jabbānah.

Commentary

line 1. Illegible.
line 7-8. Illegible after these words.
line 9. For 'Alam al-Dīn Wurdashār, the Ayyūbid governor, cf. Inscription no. 2 above with references.
line 11. 603/1206-7.
line 12. For the Jabbānah, cf. above, *The mosques* etc. This must be a reference to the rebuilding of the Jabbānah at this time.
line 17. This must be the well in the Great Mosque.

Inscriptions nos. 4-10

1 or 2 lines remaining of 3 or 4 lines, though identical inscriptions in simple Kūfic.
One is situated approximately 6 metres above the ground, built into the northern wall, while the other six, about the same distance from the ground, are set in the eastern wall.
See pl. 18.55
Arabic text

بسم الله الرحمن الرحيم بركة / من / الله / ❋

Translation

In the name of God, the Compassionate, the Merciful.
Blessing from God .....

Commentary

These are extremely interesting inscriptions. In all cases after the *basmalah* and the expression *barakah min Allāh,* they have been deliberately mutilated and the remainder of the inscription has been systematically chipped away. Stories fairly current in Ṣan'ā' that these inscriptions were tampered with by the late Imām Aḥmad can be immediately dismissed, for it is clear that the mutilation is not recent. Nor too can the deletions have been by accident. We are left, therefore, with the problem of explaining this unusual phenomenon. Bearing in mind the comments of at least one late historian that the eastern side of the Great Mosque was added by the Ṣulayḥid queen, Arwā bint Aḥmad, in the 5th/11th century, first thoughts turned on the possibility that these inscriptions might have contained Ismā'īlī remarks repugnant to some later Sunnī or Zaydī ruler of the city. On stylistic grounds, however, this is unlikely. It can be said with confidence that these inscriptions date from a period before the 5th/11th century, and they probably should be considered as belonging to the 2nd/8th century.

While we should regard the style of the inscriptions as being the most important criterion in their dating, we must recall that their mutilation must also be explained. If they are indeed 2nd/8th century inscriptions and since there can be no doubt about the far from recent deletion of all but their initial pious phrases, it is tempting to suggest that they are in fact the work of one of the Umayyad officials in Ṣan'ā' and that they were mutilated by the 'Abbāsid officials who took over after the Caliphate changed hands in 133/750. We know that the 'Abbāsids ruthlessly destroyed, wherever possible, not only all literary traces of their predecessors, but also the Umayyads themselves. Is it not possible therefore that the new 'Abbāsid governor of Ṣan'ā' obliterated any mention of the Umayyads on any inscription upon which he could lay his hands? At the same time it would not be proper to delete the *basmalah* and an expression such as *barakah min Allāh.*

A strong word of caution must here be added however. Probably because of the dearth of epigraphic material available to the scholar, it is not at present possible to state categorically that these are inscriptions executed prior to the year 133/750 and the question of exact dating is best taken no further at present.

A final comment is necessary here to link what has been said above to the historical and architectural evidence presented in the description of the Great Mosque. In particular the above should not be taken as an argument that the eastern side dates from the 2nd/8th century. If the inscriptions are as old as this, they could without difficulty have been built neatly into the northern and eastern walls at a later date in order to appear as they do today. Indeed there is no evidence to suggest that they were originally part of the Great Mosque at all.

Summary of the History of the Great Mosque

Of the earliest mosque, built at the order of the Prophet Muḥammad, probably nothing remains unless it be a few fragments of ornament now gathered with others in the high western ceiling. From the position of the natural rock al-Mulamlamah, which still survives beneath a later marking-stone, it seems likely that the western edge of the mosque has not changed from this earliest building. Its *qiblah* wall lay across the present courtyard, with the building probably encircling a smaller square courtyard. The southern limit of the mosque apparently coincided with the present southern wall. To the north of the *qiblah* wall, half under the present prayer hall and partly beyond it, was the large tomb of an early prophet. It is possible that some of the arcading may survive from this earliest mosque, reincorporated in the second mosque—but, as that mosque is reported to have been a new structure, this seems unlikely.

The rebuilding of al-Walīd, ca. 86-96/705-715, was probably responsible for the general external character of the mosque as it remains today. Much of the stonework of the northern, western and southern sides may date from this time, and in the remainder of the walls, many of the stones. In al-Walīd's mosque the plan was greatly enlarged, and took the shape it has today, except that it was later widened to the east. The prophet's tomb to the north of the mosque was demolished, perhaps only partially at first, to make way for the moving of the *qiblah* wall and the whole of the prayer hall further north, more than doubling the size of the courtyard. The general character of the arcading probably dates from this period, when capitals, shafts, bases, wooden decoration and possibly at least one door were removed from the ruins of the

Christian cathedral further east (from which some mosaics had already been removed in 65/684 to decorate the Ka'bah in Mecca).[66] This Christian material was mixed indiscriminately with other pre-Islamic material of indigenous South Arabian style, taken from the great ruined palace of Ghumdān alongside, and possibly from some Sabaean temples, and this pre-Islamic material was used to build the columns under the brick arcading. There was a richly decorated *miḥrāb* to this mosque, which was afterwards stripped of its ornament by a zealous Qāḍī. The five lanterns allowing top light to fall on the centre of the *qiblah* wall were probably added at this time, if they were not moved from the first mosque—or even from a pre-Islamic building.

The mosque was subsequently repaired on the order of the 'Abbāsid Caliph in 136/753-4, according to the inscription preserved in the courtyard. This phase may have seen the erection of a single minaret, the eastern, standing when the Qarmaṭians came in 299/911-12. Alternatively, this minaret could have originally been built during al-Walīd's building (86-96/705-715), which would be the only likely date if the eastern minaret was enlarged before 133/750.[67]

In 262/875-6, the mosque was ruined in a great flood, and had to be extensively repaired, but was not completely rebuilt, to judge by a remark of Ibn Rustah.[68] The close resemblance between the fragments in the western bays of the prayer hall and the ceiling of the Shibām mosque, known to have been built at about this time, suggest that the Ṣan'ā' mosque was given a similar high, richly decorated ceiling, afterwards destroyed and lowered.

While the colour on the ceiling was still fresh and bright the mosque was deliberately flooded by a leader of the Qarmaṭians in 299/911-12. He allowed the water to remain 'until the freshness of the decoration in the ceiling was lost.' This doubtless caused considerable damage to the structure, and may have directly resulted in the need, probably within a century, to lower the ceiling and replace it by one of plainer design, preserving only four bays of the higher ceiling at the western end, into which the surviving wooden fragments were gathered.

The eastern wing was moved more than ten metres further east, thus widening the courtyard and enlarging the northern and southern prayer halls, at a date which it is not yet possible to establish with absolute certainty. The evidence of the defaced inscriptions, which were almost certainly intended for the eastern wall, in view of their exact relationship to the openings, and the form and construction of the openings themselves, with their close stylistic similarity to those of the Great Mosque in Damascus, argue for an Umayyad date, before 133/750.

The eastern wing was rebuilt and the northern wall, or its central porch, altered by Queen Arwā bint Aḥmad in 525/1130-31. She added a magnificently carved, painted and gilded ceiling to the eastern wing, and probably the slightly less splendid one on the old western wing. The ceiling of the northern prayer hall was partly redecorated with painting in the same style, and some calligraphy.

The two minarets were 'restored' in the early years of the 7th/13th century. They do not seem to have been substantially altered since, except for repairs after damage to the eastern minaret in the 11th/17th century.

A new *miḥrāb* was made in 655/1266-67, which was removed when the present *miḥrāb* was added during this century.

The domed building for *waqf* documents in the courtyard was built in 1012-6/1603-7, and the courtyard (re-)paved. It is possible that a central building existed in the courtyard before this date, and not inconceivable that it originally had some other function, probably again on the pattern of al-Walīd's other mosques, such as that at Damascus, and later mosques at Aleppo and Homs, a treasury raised on columns or arches, possibly with a fountain underneath it.[69]

In 1355/1936-7, Imām Yaḥyā built a library over the first aisle of the southern hall, and an extra aisle was built into the courtyard at the same time to support it.[70]

Supplementary Note

At the moment of going to press, radio carbon dates for certain wooden parts of the Great Mosque were received from the Research Laboratory of the British Museum. The three samples of wood submitted to the Laboratory came from the Ṣan'ā' Museum to which they were removed, at the suggestion of Dr Paolo Costa, at the time of the extensive restoration of the northern prayer-hall in 1974. The three dated pieces are as follows:

1 A section of the wooden frieze running continuously round the upper wall of the northern prayer-hall immediately below the beams, with a carved Kūfic inscription (see p. 339, pl. 18.42).
The radio-carbon dating is 1060 A.D. with a margin of ±50 years, i.e., between 1010-1110 A.D. This strongly supports among others, the Fāṭimī Ṭayyibī tradition that Queen Arwā renovated the Jāmi' (see p. 324b), as the year 1060 falls inside the Ṣulayḥid period, but she is unlikely to have done so any later than 1086 A.D. (see p. 59a) when she removed to Dhū Jiblah. (The statement (p. 324a) that Yaḥyā b. al-Ḥusayn records she built the eastern side of the mosque in 525/1130-31 is an error to be corrected – he gives *no* date for this.) On stylistic grounds also the inscription looks Fāṭimid.

2 A projecting end beam, ornamented with winged motifs, from the four high panels at the extreme western side of the northern prayer-hall (exhibited in London at the Nomad and City Exhibition at the British Museum of Mankind in 1976 (see Kirkman, *City of Ṣan'ā'*, 72). The radio-carbon dating is 1160 A.D. ±60 years, i.e., between 1110-1210 A.D. It might therefore fall in the Hamdānid or Ayyūbid period.

3 A carved, pierced, tympanum, a fanlight from the four high panels (p. 339, pl. 18.42) at the extreme western side of the northern prayer-hall also, likewise exhibited in London (see *City of Ṣan'ā'*, loc. cit.). The radio-carbon dating is 1170 A.D. ±60 years, i.e., between 1110-1230 A.D. It might therefore fall in the Hamdānid or Ayyūbid period.

The authors wish to express their grateful appreciation of the work carried out on these specimens and the valuable results obtained, to the Trustees of the British Museum and in particular, to Dr Richard Burleigh, Director of the Research Laboratory.

66 See p.48a.

67 Cf. the erection of minarets during al-Walīd's rebuilding of the mosque at Medina, in Sauvaget, op. cit.

68 Ibn Rustah, op. cit., 110, regarded the mosque as ancient when he saw it in or about the year 290/903: 'some local *faqīhs* have mentioned that it was built at the command of the Apostle of God and in his lifetime.'

69 See Creswell, I, 201-2.

70 Work appearing late for proper discussion here is Finster, Barbara and Jürgen Schmidt, 'Die Freitagsmoschee von Ṣan'ā'', *Baghdader Mitteilungen*, 9, 1978, and 10, 1979. However, we do not agree with the main conclusions regarding dating reached in these articles.